Connecting People with Jobs

Evaluation of Active Labour Market Policies in Finland



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Foreword

Giving people better opportunities to participate in the labour market is a key policy objective in all OECD and EU countries. More and better employment increases disposable income, strengthens economic growth and improves well-being. Well-tailored labour market and social protection policies are a key factor in promoting the creation of high-quality jobs and increasing activity rates. Such policies need to address pressing structural challenges, such as rapid population ageing and evolving skill needs, driven by digitalisation and the green transition. They should also foster social inclusion and mobilise all of society.

A major challenge that policy makers face is to make the most effective and efficient use of limited public funds. Knowing what policy measures work best requires the collection of the necessary data, careful planning of impact evaluations and use of their results to guide policy making. Advances in data collection and storage and modern computer power means that countries now have a greater ability than ever before to conduct evaluations of their policies using high-quality administrative data and survey data. Expertise is needed to conduct robust and credible policy evaluation but also effective communication of their results to inform policy makers.

The OECD is carrying out a set of reviews of labour market and social protection policies to encourage greater labour market participation and promote better employment opportunities, with a special focus on the most disadvantaged who face the greatest barriers to finding quality jobs. This includes a series of country studies, *Connecting People with Jobs*, which provide an assessment of how well active labour market policies (ALMPs) help all groups to move into productive and rewarding jobs, and policy recommendations for improving their effectiveness.

This report on Finland uses rich administrative data from different registers in Finland to evaluate the impact of two types of training measures for unemployed people: participation in the education system via the self-motivated training framework, and shorter courses of labour market training. The analysis looks at outcomes beyond the probability of employment and examines how the selected ALMPs affect different population groups. Furthermore, the report assesses the system of impact evaluation of ALMPs in place in Finland covering the whole cycle of evidence-based policy making from strategy and planning of evaluations, resources, data collection and evaluation methodologies to dissemination of evidence and their feeding into policy making. Finally, the report makes recommendations for improving the effectiveness of Finland's ALMPs and strengthening the system of ALMP impact evaluations. The report has been undertaken within the framework of the OECD's project with the European Commission to help countries raise the quality of the data collected and their use in the evaluation of the outcomes and effectiveness of labour market programmes.

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Co-operation with Sara Flisi and Giulia Santangelo from the European Commission's Competence Centre on Microeconomic Evaluation of the Joint Research Centre and with Katarina Jaksic and Nora Wukovits from the European's Commission Directorate-General for Employment, Social Affairs and Inclusion has been instrumental for the project and the preparation of this report.

The report has also greatly benefited from the information and assessments received from stakeholders in Finland who the OECD team and the European Commission met with during virtual fact-finding missions in November to December 2021. These included representatives from the Ministry of Economic Affairs and Employment, the Ministry of Education and Culture, the Ministry of Social Affairs and Health, the Ministry of Finance, Uusimaa and Varsinais-Suomi TE Offices, the Lappland ELY centre, the Confederation of Finnish Industries, the Finnish Entrepreneurs, the Confederation of Unions for academic professionals (Akava), the Confederation of Salaried Employees (STTK); the Central Organisation of Trade Unions (SAK), the Social Insurance Institute (KELA), the YTK unemployment insurance fund, Statistics Finland, ETLA Economic Research, VATT Institute for Economic Research and Pellervo Research Institute. The support from Heikki Räisänen (Ministry of Economic Affairs and Employment) and Max Ros (Statistics Finland) was invaluable for the success of the project.

Comments on earlier versions of this report – through virtual meetings and in writing – greatly benefited the report. Comments were provided by various stakeholders in Finland, the European Commission's Directorate-General for Employment, Social Affairs and Inclusion, the European Commission's Joint Research Centre / Centre for Research on Impact Evaluation, as well as Stefano Scarpetta and Mark Keese at the OECD.

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The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

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Executive summary

Over the past decade, Finland's labour market has been characterised by high participation and employment rates (79.3% and 73.8% respectively in 2022) in comparison with other OECD countries and a relatively stronger recovery in employment and participation after the COVID-19 pandemic. Unemployment has also continued to recover, standing at 6.9% in 2022, though it is still relatively high compared to other OECD countries. Moreover, about one in four unemployed people in 2021 were unemployed for more than one year and 6.8% of the labour force who were not actively looking for work, would be willing to take work if it was offered. There are also large labour market disparities across population groups, with youth, older people, men and those with a low education level facing higher unemployment rates than other groups.

However, generally less than half of jobseekers in Finland contact the public employment service (PES) to search for work (44% in 2020), implying that there is a large number of individuals who do not use the support that is available to them. Strengthening the outreach of the PES may also go some way to improving job matching for jobseekers but also strengthening labour market ties for those marginally attached. Ambitious ongoing reforms aim to transform ALMP delivery through changes to job-search obligations and enhanced support and a transfer of responsibility from central government to municipalities.

Finland spends 0.86% of GDP on ALMPs, close to twice as much as the OECD on average (0.45%). A big part of ALMP funding (0.36% of GDP) is spent on training for jobseekers, which is well justified to promote adult learning, address labour shortages and support transitions in the labour market. To ensure public money is well spent, it is crucial that these programmes are evaluated in terms of reaching the people in need and being effective in connecting people with good jobs. This is the focus of this report which explores Finland's rich and good-quality administrative data to evaluate the impact of the two main training programmes available to jobseekers: the labour market training (LMT) and self-motivated education with unemployment benefits (SMT).

Finland has been able to generate substantial evidence on the outcomes of key ALMPs despite limited resources devoted to related research. This is done mainly through a well-established and transparent system to contract out research and a large range of administrative data which can be linked across registers. The research results are disseminated systematically but more could be done to strengthen the connection with policy making and ensure the results are taken into consideration in policy design.

Finland could do more to ensure training programmes reach the people who need them and benefit from them the most, while improving their effectiveness for other groups. In addition, some steps could be taken to further improve the framework for ALMP impact evaluation and promote evidence-informed policy making. The key policy recommendations emerging from this review include:

- **Ensure sound evidence on the effectiveness of ALMPs and changes in the ALMP system,** including by extending the use of pilots and trials before large-scale implementation and conducting cost-benefit analyses in a systematic way.

- **Strengthen the role of the Ministry of Economic Affairs and Employment as the driver for evidence-based policy making in the field of ALMPs**, by building a long-term strategic view on research and allocating more resources to research activities.
- **Use the ongoing ALMP reforms to build evidence on the effectiveness of the different features of institutional set-ups and operating models of ALMP provision** by ensuring that evidence building is embedded in such ongoing reforms.
- **Improve data coverage, quality and availability for analysis and research on ALMPs** by scaling up funding for Statistics Finland to support research activities and strengthening data exchange between administrative registers to support employment counsellors, jobseekers and employers, as well as to ensure data accuracy.
- **Improve targeting and effectiveness of SMT and LMT** by focusing them to those groups who benefit the most from these programmes while re-designing them to improve the labour market outcomes of groups that are not yet experiencing the beneficial effects of these measures.

  Use SMT and LMT to promote labour mobility and reduce labour market shortages by strengthening these programmes towards sectors and occupations with labour shortages and ensuring labour mobility does not come at the expense of job quality.

1 Assessment and recommendations

Finland invests heavily in active labour market policies (ALMPs) and is one of the top OECD countries when it comes to spending on training programmes for the unemployed. An evaluation of its two main training programmes for unemployed people (labour market training and self-motivated education or studies while maintaining unemployment benefits) suggests that they have positive effects on employment after an initial long lock-in period and support labour mobility across occupations. Further benefits could be derived by targeting these programmes to the groups who benefit the most from them, notably older jobseekers and women. At the same time, Finland should invest more in evidence-informed policy making by increasing the capacity of the Ministry of Economic Affairs and Employment to conduct and outsource research and by improving data coverage, quality and availability for analysis and research on ALMPs. Building the evidence base will be even more important in the context of the ongoing reforms of the ALMP system.

1.1. Finland has generous active labour market policy spending but could do more to reach out to jobseekers not utilising the Public Employment Service

1.1.1. Finland has a well performing labour market but with room for improvement on adult skills development

Over the past decade, Finland's labour market has been characterised by relatively high participation and employment alongside relatively high unemployment. In 2021, Finland's employment rate of adults aged 15-64 was 73% and the labour market participation rate 79%, 5 and 6.6 percentage points higher than the OECD average respectively. Labour market performance has continued to improve in Finland in 2022, with the employment rate increasing to 73.8%, the participation rate increasing to 79.3% and unemployment falling to 6.9%. However, unemployment is still comparatively high relative to the OECD. In 2021 Finland's unemployment rate of 7.8% was 1.4 percentage points higher than the OECD average (6.3%). In addition, in 2021, individuals who were unemployed for one year or longer made up 24.2% of total unemployment in Finland, below the OECD average of 28.4% but above the 20.4% of other Nordic countries. Finland also has a high share of individuals who are marginally attached to the labour force. The proportion of its labour force who are not actively looking for work, but who would be willing to take work if it was offered, was 6.8% in 2021, almost four times larger than for the OECD (1.8%). To address these labour market challenges, more can be done to reach out to people needing support and help them connect with jobs.

Further disparities exist in Finland in labour market outcomes for specific groups of individuals. Outcomes tend to be poorer for younger and older individuals, for men and the less well educated. Like many OECD countries, young people in Finland have higher unemployment rates than their older peers. In 2021, unemployment rates for men and women aged 15-24 in Finland were similar, at around 16%, around twice as high as the overall unemployment rate. For women aged 55-64, unemployment in Finland was 6.8%, more than 2 percentage points higher than the OECD average of 4.5%. Similarly, men aged 55-64 had an unemployment rate in Finland of 8%, relative to 4.8% in the OECD. Unlike women, men also experience higher unemployment relative to the OECD across all other ages. At the same time, whilst for the high educated, unemployment is similar in Finland and the OECD, the unemployment rate for the low educated (13.8%) is significantly higher in Finland than for the OECD as a whole (10.7%). Finland has also had a high share of job shortages in predominantly high-skilled occupations, far above the average for other OECD countries. In 2021, the Finland's number of open job vacancies was at its highest level in 30 years. This highlights the need for active labour market policies (ALMPs) that can serve these different groups of individuals and equip them with the skills required in the labour market.

The unemployment rate in Finland increased less than the OECD average after the COVID-19 pandemic struck. However, it took 27 months to return to pre-pandemic levels, six months longer than the OECD average, and despite a relatively stronger recovery in employment and participation rates.

1.1.2. Spending on active labour market policies is generous, but outreach by the public employment service could be improved

Finland has a relatively generous set of ALMPs. In 2020, Finland spent 0.86% of GDP on ALMPs versus 0.48% for the OECD on average and only below ALMP spending in Denmark and Sweden. This higher-than-average spending is a feature that has persisted over time. Spending is heavily focused on training and direct job creation in Finland. In 2020, close to half of ALMP budget (41.9%) was spent on training and 15.1% on direct job creation (versus 22.9% and 8.2% in the OECD respectively). Finland also has slightly more generous spending on labour market policies for people with disabilities and job placement and related services by the Public Employment Service (PES) relative to its GDP, although their share in the overall ALMP budget is lower than in the OECD on average.

The provision of ALMPs in Finland is undertaken by a mixture of government bodies. The main stakeholders are the Ministry of Economic Affairs and Employment (TEM), Employment and Economic Development Offices (TE Offices), Centres for Economic Development, Transport and the Environment (ELY Centres), the Development and Administrative Centre for TE Offices and ELY Centres (KEHA Centre), and the Ministry of Education and Culture (OKM). TEM has policy responsibility for labour market policies including ALMPs. It manages and monitors the implementation of the public employment and business services (TE services, the Finnish equivalent of public employment services) and has oversight and control of the TE Offices. The TE Offices directly implement the delivery of TE services. There are 15 offices located around Finland that offer a range of services to support job search and employment. Individuals are primarily instructed to register directly for TE services online in the first instance. This is complemented by in-person services such as vocational education and career guidance, which do not require registration at the TE office. ELY centres are tasked with promoting regional competitiveness, well-being and sustainable development and belong to the administrative branch of TEM. They offer numerous services to support the TE Offices. This includes forecasts of long-term regional education and training needs, which support the TE Offices to plan training and employment services. The ELY centres are also responsible for the procurement and tendering of training contracts for the TE Offices. Other ministries guide the ELY centres wider functions, such as those relating to the environment, traffic or fisheries. The KEHA centre was formed in 2015 to provide administrative and development support to the network of ELY and TE Offices. Its services include human resources management, budgeting and payment services for some benefits and IT development. OKM is involved in both main training programmes that are available to jobseekers and are evaluated in this report. For labour market training (LMT), OKM directly funds training that leads towards an accredited education award. OKM also grants providers of education permits to provide vocational educational training. For self-motivated training (SMT), OKM directly funds the programmes and delivers them through its existing educational institutions.

This network of stakeholders works together to offer a generous system of support to help individuals acquire skills and connect with jobs. However, this co-exists with a large number of individuals who do not use the support that is available to them. Strengthening the outreach of the PES may also go some way to improving job matching for jobseekers but also strengthening labour market ties for those marginally attached. In 2020, European Union Labour Force Survey data show that only 44% of jobseekers in Finland contacted the PES to search for work. At the same time, only 23% of jobseekers contacted a private employment service. This means that a relatively large proportion of jobseekers undertake job search completely independently. Some of these persons could benefit from PES support.

1.1.3. Ambitious reforms will radically alter active labour market policy delivery

Two sets of reform are underway in Finland to transform the delivery of its labour market support to jobseekers. On 2 May 2022, a new customer service model came into force, designed to provide jobseekers with more support, alongside obligations on job search. Quarterly interviews with job counsellors were replaced by fortnightly meetings and stipulations on required numbers of job applications came into force. This reform is set to be accompanied by a transfer of responsibilities from central government to municipalities, so that the latter are directly responsible for providing ALMPs. To ensure effective ALMP provision, financial incentives for municipalities will be altered, by making them increasingly financially responsible for a part of social security of jobseekers as unemployment duration lengthens. In this sense, getting individuals into work faster has a direct benefit to municipalities' financial position. Each of these reforms is estimated to move an additional 10 000 individuals into employment.

It will be important to ensure the proper evaluation of both reforms so that they can be appraised against their objectives. The transfer of responsibilities to municipalities is being accompanied by a large set of pilots to inform the final roll-out. This is welcome as it will provide evidence on how the reform can be refined prior to full-scale roll-out. However, learning from this stage should be tempered and contextualised taking into account the more tightly controlled and monitoring phase that can accompany such trials. This

may mean that inferences from the pilots do not generalise well when the policy is implemented more widely. Finland has opted to transfer responsibilities on the 1 January 2025, which precludes the immediate ability for further testing of the municipalities not involved in the earlier pilots. Careful consideration should be given on how best to generate evidence and metrics that will still allow to test its original objectives. Similarly, in order to test the success of increasing job counsellor meeting frequency and job-search requirements, data that allow an investigation at the counsellor or office level may allow some inference to be gained, by looking at how variation in meeting frequency impacts job finding rates.

1.2. Evidence on the effectiveness of key active labour market policies has been generated despite limited resources

1.2.1. TEM needs a long-term strategy and more resources for research to drive policy making on active labour market policies

To design ALMPs and their delivery in an evidence-based manner, the analysis and research activities of TEM need to systematically collect and generate sufficient and relevant evidence. TEM uses a decentralised model for these activities, which can lead to people with more diverse skills and expertise conducting these tasks but might also cause fragmentation in knowledge generation. With the tasks for analysis and research scattered across the ministry, it is difficult to ensure systematic knowledge generation, avoid duplication and ensure that data and knowledge sharing are streamlined for maximum efficiency. A co-ordination group for policy analysis has been established to overcome fragmentation and an annual plan for research is agreed for research projects to be contracted out. Nevertheless, TEM does not have a longer-term strategy for research and analysis in order to be able to manage and develop analytical capacity, and above all, ensure continued improvement in evidence-based policy making. In addition to specific research projects in the annual plan, the longer-term strategy should outline the objectives and priorities of research activities, and the milestones to reach the objectives, considering both internal capacity and contracting out.

TEM's underlying principle for labour market research has been to contract major policy evaluations out to external researchers. The annual research plan defines the research to be contracted out and the allocated budget across policy fields, with the topic of labour market policy being just one of the many topics covered. Furthermore, a large share of the research budget goes towards annual reviews with only a low budget for actual research, which leaves a limited possibility to conduct ALMP evaluations within TEM's research budget.

TEM has only a few researchers and economists as most staff (including those partially conducting analysis) have a qualification related to legal affairs. Hence there is currently only a limited number of staff that can conduct policy impact evaluations or design research projects for contracting out and steer these projects in partnership with external researchers. Furthermore, these skills and knowledge are not currently actively developed or maintained, as evaluation activities are not conducted in-house. In addition, a limited number of staff qualified or available for analytical tasks more generally means that some of the needs for evidence are not met, as only the more urgent needs for policy analysis can be addressed. To overcome the capacity challenges, TEM should allocate more resources for analysis and research, and preferably hire some economists who could support these functions full time.

Since 2014, Finland implements a cross-ministry research instrument – the joint analysis, assessment and research activities (VN TEAS) – co-ordinated by the government (the Prime Minister's Office) that TEM has used to fill the gaps in its internal capacity for research. The government working group for the co-ordination of research, foresight and assessment activities (TEA Working Group) consisting of representatives across the ministries in Finland, assesses the research requests of the ministries and makes a proposal for the VN TEAS annual plan. The project assessment process by the TEA Working

Group ensures that only strategic research needs of cross-ministry relevance get funded via the VN TEAS. The VN TEAS can be instrumental in generating evidence in case of more major ALMP reforms that could potentially affect other policy areas, such as education, social and health policy. Yet it cannot be the only, or even the main instrument, to fund systematic ALMP evaluations due to its nature.

The Ministry of Finance has a greater capacity to conduct policy evaluations than many other ministries in Finland as it employs a substantial number of economists, some of whom have the skills to conduct counterfactual impact evaluations. The Ministry of Finance has been covering some of the other ministries' research needs when it finds the topic politically and financially relevant. While research conducted by the Ministry of Finance can overcome some gaps in evidence generation in the framework of limited research budget in TEM, this mechanism does not ensure that evidence generation on ALMPs meets the strategic needs of TEM. As TEM is the policy designer in the field of ALMPs, it needs to assign sufficient resources to related knowledge generation to be able to drive labour policy and do so based on evidence.

1.2.2. Disseminating research results is systematic but the channel to policy makers needs to be strengthened

There are no systematic dissemination channels between analysts and policy makers in TEM, as the initiative to learn about the new research results comes occasionally from the minister and key policy makers, but these exchanges are not initiated by the analysts' side. Nevertheless, the dissemination of research results is generally very comprehensive and well established, being potentially a good practice example for other countries. The results of analysis and research on labour policy issues conducted internally or contracted-out by TEM are systematically published in a dedicated publication series, accompanied by occasional press conferences and press releases in case the key results could be of wider public interest. The research conducted by the VN TEAS has its own dedicated publication series managed by the Prime Minister's Office.

The evidence gained via the research projects of TEM and the VN TEAS is not systematically taken into consideration in policy design. The reasons for this can be needs to make changes faster than the evidence can be generated, election cycles, insufficient dissemination of evidence, dismissing evidence due to inconclusive research results, as well as gaps in evidence. Although piloting and experiments in the field of ALMPs are more common in Finland than in many other OECD countries, even these results do not necessarily feed into policy design. A pilot was carefully designed for the currently on-going major reform in the institutional set-up of ALMP provision, but the decision to go on with the reform was taken before the end and evaluation of the pilot.

To support evidence-based policy design and implementation, analysts in TEM need to take initiative to disseminate the analysis results more systematically to policy makers, policy implementers and the broader public. The content and channel of communication need to be defined based on the specific audience. For example, the communication to policy designers might need to focus less on the evaluation methods, and more on policy design elements necessitating change. Communication to policy implementers might need to take a form of guidelines for employment counsellors.

To continuously improve the quality of draft laws, and particularly the impact assessments in the government proposals, Finland established the Finnish Council of Regulatory Impact Analysis (FCRIA) in 2016. Above all, this council assesses whether the impact evaluations of the proposed legal changes are appropriate and makes proposals to improve them. To further enhance the link between evidence and policy design, Finland could consider extending the tasks of the FCRIA to monitor if all relevant evidence available has been indeed used as inputs in the draft legal proposals. As a key priority, the FCRIA could check whether above all the research results of the VN TEAS have been considered, as these are ought to be the key strategic research projects. Furthermore, the FCRIA and the VN TEAS could co-operate in exchanging information on on-going research projects and draft legislation being assessed to avoid a situation where a major legal change is taking place while the evidence generation is still in process.

1.2.3. TEM has a well-established and transparent system to contract out research

TEM designs research and analysis projects internally, regardless of whether the project is to be conducted internally or contracted out. External researchers are generally not involved in the design of the project descriptions as the procurement process needs to be transparent and fair for any potential bidder. Hence, exchanging research ideas with external researchers takes place only via more general research seminars. Yet, the design and methodology of the internal projects, particularly when designing major trials to be evaluated later, should be discussed more explicitly and openly with external researchers to generate credible evidence.

The procurement process to outsource research in TEM is well-established and transparent, following the national procurement legislation. TEM focuses on quality components in its assessment criteria in procurement, selecting the most economically advantageous tender. The assessments of tenders are considered to be very transparent by the applicants (research organisations). Thus, there have been almost no cases of contesting the assessment results over the years. A dedicated steering group is set up for each contracted out research project in TEM, involving relevant experts from policy design as well as analysis. The steering group guides and monitors the research projects, ensuring that the external researchers have all of the relevant information available and the generated evidence is sound for policy making.

The greatest challenge for researchers in the outsourced projects is the foreseen project timeline. As policy makers expect the evidence quickly, the timeline in the procurement documents sometimes underestimates the time it takes to generate credible evidence. The analysts in TEM need to create more awareness among the policy makers on the feasible timelines of research projects, such as allowing some time after policy implementation for the impacts to materialise before evaluating these. In addition, Statistics Finland and administrative registers need to continue their efforts to shorten time lags in data availability for research.

TEM aims to ensure research quality via its sound procurement process, project management and publication of research results. TEM could additionally consider a peer review process for the research projects it conducts internally. Moreover, if this approach would be used, TEM could consider conducing ALMP impact evaluations internally as these are currently fully contracted out due to objectivity concerns. Internal analysis with external peer reviewing could be, for example, used when the evidence needs to be generated quickly, as TEM then has better control over data access as well as the timeline more generally. Nonetheless, conducting ALMP evaluations internally may require building the capacity first for this kind of research, and above all, hiring more staff with appropriate skills and knowledge.

1.2.4. The available evidence on impact could be augmented by cost-benefit analyses

In total, a considerable volume of evidence on ALMPs has been generated via the different funding mechanisms over past years. Some evidence on the effectiveness of the key ALMPs (jobseeker counselling, wage subsidies, work-related rehabilitation, business start-up subsidies) is publicly available via the research reports of the VN TEAS. A few additional counterfactual impact evaluations of ALMPs (above all training) have been conducted by the Ministry of Finance. The research and analysis conducted and outsourced by TEM provides inputs for policy making via ex-ante evaluations and descriptive analysis of ALMP measures and services, as well as reforms and digital tools in the Finnish ALMP system. The impact evaluations of ALMPs use counterfactual evaluation methodology, combining quasi-experimental and experimental designs. Although Finland is already using experimental design for ALMP impact evaluation more than many OECD countries, applying pilots and trials could be used even more to generate credible evidence as the evidence generated using quasi-experimental design is often criticised or even dismissed by policy makers as being inconclusive.

Finland has scope for improvement in conducting systematically cost-benefit analyses to demonstrate the value added of different ALMPs more explicitly. Cost-benefit analyses should build on counterfactual impact evaluations, examining the impact of ALMPs in relation to the costs of implementing the ALMP and, if possible, the opportunity costs for participants (e.g. foregone earnings) as well as indirect costs on non-participants (e.g. negative externalities). Conducting cost-benefit analyses requires Finland to make cost data available for research purposes across the many registers containing cost data on services, measures and benefits for jobseekers.

1.3. Data to support evidence generation on active labour market policies are available for researchers, but further investments could facilitate research significantly

1.3.1. Modernising the IT infrastructure of employment services would improve the availability and quality of research data

When the KEHA Centre became responsible for the IT infrastructure for ALMPs in 2017, it started quickly replacing the legacy systems. Nevertheless, the staff in TE Offices and ELY Centres still use the legacy IT system (URA system) to register jobseekers and provide ALMPs, which can affect the quality of the data used in ALMP impact evaluations, in addition to negative implications on ALMP provision. For example, some data fields that could be structured (classifications and code lists) are implemented as free text, not supporting well the work of employment counsellors or statistics and research based on these data. Some fields are mandatory to fill, although employment counsellors rarely have information on these issues, resulting in incorrect data in the database. The URA system is not sufficiently exchanging data with other administrative registers in Finland (such as on employment or education) to fully support services provision, as well as data accuracy. In addition, it has not been possible to adjust the URA system to align it with all recent changes in policy design.

An automatic data exchange is set up to provide data from the URA system to TEM monthly, supporting the production of timely statistics. The individual level dataset that TEM receives from the KEHA Centre, is further shared with Statistics Finland that uses the data for national statistics and can make these available for researchers, including for ALMP evaluation. Nonetheless, the outdated IT infrastructure for ALMP provision, including the data analytics tools, hinders the data availability for statistics, analysis and research on ALMPs. The dataset shared regularly with TEM and Statistics Finland is inflexible and has remained the same over the past years regardless of changes in policy design.

A sudden decision on changing the institutional set-up of ALMP provision in September 2021 has further delayed the IT modernisation process, as the exact responsibilities of each stakeholder need to be assigned before the IT solutions to support these roles can be defined. In addition to a central operational IT system and a data analytics solution to support data availability for monitoring and evaluation, some municipalities might want to set up their own IT platforms that have interfaces with the national IT infrastructure. Hence, before the developments of the national IT infrastructure can be adjusted to the new institutional set-up, the government and TEM need to be clear on which responsibilities will be transferred to municipalities, what will be their scope of freedom regarding their operating models and business processes in implementing ALMPs, and what kind of support needs to be provided by the central level.

As TEM is governing the KEHA Centre, it needs to drive and enable the process of modernisation of the IT infrastructure to ensure well-performing ALMP provision, as well as data availability for evidence generation. First, TEM needs to be in a systematic dialogue with the KEHA Centre in preparing for the reform and developing the IT infrastructure to meet the needs of the new set-up. The operational IT system needs to maximise its support to its users, i.e. employment counsellors. Hence, the planning, development and testing needs to involve employment counsellors (currently in the TE Offices, but to be transferred to

the municipalities), as well as the municipalities more generally. The plans need to be discussed not only with those municipalities that are eager to go through the reform, have been part of the piloting of the new system and tend to have a higher capacity, but also with those for which the reform might be challenging and thus might have different needs of support. Second, in addition to the careful design of data exchange and integration of IT infrastructure between the core stakeholders of ALMP provision, data exchanges with other administrative registers need to be strengthened to support employment counsellors, jobseekers and employers, as well as to ensure data accuracy. Data already available in other administrative registers should not be collected again but received automatically, requiring Finland to potentially revise some of the regulation to enable additional data exchange for relevant operational purposes. Third, TEM (and the government) needs to find a sufficient and sustainable funding model for the KEHA Centre to enable it to carry out its responsibilities, particularly in terms of projects and developments that have longer than one year horizon.

1.3.2. Rich research data are available securely via Statistics Finland, although costs, timelines and metadata quality can be hurdles for research

The amendments of the Statistics Act in 2013 made it possible for Statistics Finland to share their data remotely for research purposes in a pseudonymised form. This has significantly widened the data availability for researchers as the uniquely pseudonymised format enables researchers access full datasets from Statistics Finland and combine different datasets according to the research needs. Data exchange between Statistics Finland and various registers in Finland has been established often many years ago, although continuous work takes place to keep the data exchange up to date when the IT infrastructure, collected data and policies change. Contrary to quite a few other OECD countries, Finland uses a unique identification number (the social security number) for all its residents across administrative registers, enabling to link data accurately across registers.

The scope of data available in Statistics Finland can support well ALMP impact evaluations. First, the datasets include the original pre-defined datasets on jobseekers, ALMPs and vacancies from URA system, as well as individual level indicators calculated for statistics based on URA data, that can on some occasions further facilitate conducting evaluations. Second, the datasets include rich data on socio-economic characteristics of the population to construct a counterfactual for the evaluation (e.g. family composition, household data), as well as observe the effects of ALMPs on different outcomes (using employment, education and firm data). As the data on ALMPs and jobseekers from the URA register are available securely via Statistics Finland, TEM refers the researchers there for data needs rather than sharing data directly with them. In case researchers' data needs go beyond the dataset shared by KEHA Centre with TEM (which are available through Statistics Finland), they are referred to request additional data from the KEHA Centre, which can also be optionally made available via Statistics Finland, enabling to link these data with other register data already in Statistics Finland.

Nevertheless, the data in Statistics Finland are generally not fit to evaluate very recent changes in ALMP design. First, many datasets are shared with Statistics Finland only once a year. Second, it takes some time for the registers to share their data with Statistics Finland. Third, the data shared from the registers with Statistics Finland go through a thorough quality check and pseudonymisation that take some time. And fourth, Statistics Finland is not currently sharing the data for research purposes before they have published the official statistics based on these data. Further modernisation of the IT infrastructure across the public sector in Finland is necessary to ensure better data quality in the registers, prepare operational data better for data analytics and establish more timely and frequent automatic data exchanges. Better financing of Statistics Finland would enable it to shorten data preparation periods and produce more timely statistics, simultaneously shortening the time lags of research data as a side effect.

Statistics Finland collects metadata systematically together with data from the administrative registers and makes these available for researchers. While the metadata quality has improved over the years, it is still

limited due to the metadata shared with Statistics Finland by the registers and because of the shortage of resources of Statistics Finland. Further descriptions of data and information on addressing certain issues in the data are also not collected and shared by any other organisation, regardless of different researchers continuously facing the same issues. This approach is inefficient and can mean that the ministry outsourcing the research pays several times for the same work.

In the outsourced research projects, TEM should request that the researchers also share with TEM the codes used to conduct the research and publish these together with the reports discussing the results. First, this would bring down the costs of research projects as some of the work does not need to be repeated again (enable TEM to get more evidence within the same budget). Second, publishing the codes would serve as an additional quality assurance, as the exact methodology would be more transparent for the research community and any questionable steps in the methodology could be identified more easily.

As Statistics Finland does not receive any funding from the Ministry of Finance for the processes to share data for research purposes, the researchers accessing data need to cover the associated costs themselves. However, this funding scheme has not covered all related costs in the past, resulting in a shortage of staff to carry out the research services in Statistics Finland and long waiting times for researchers to access the data. The processing time of data applications has tended to stretch over a few months in most cases during the past years, while the waiting times have been around one year in case additional data from administrative registers has been requested to be linked with the data already in Statistics Finland. To overcome the funding issues, Statistics Finland significantly increased its prices to access data for research in the beginning of 2022 from an already high level. This means that a significantly higher share of budgets for research projects needs to be allocated to data access. In addition, ALMP impact evaluations would be possible only essentially within publicly procured research projects, and not for example for purely academic reasons. Finland needs to consider funding the research services of Statistics Finland sustainably, for example, from the state budget to cut the data application processing times and cap research data prices to support evidence generation across policy fields and encourage research not only tied to a current political agenda.

1.4. Counterfactual impact evaluation requires good techniques and good data

1.4.1. Quasi-experimental techniques seek to resolve the problem of comparison of training participants and non-participants

Where programmes have a wide diversity of potential participants, these participants may differ from their counterparts who choose not to participate in the programme. This is true for both LMT and SMT. In these programmes, individuals must express an interest in participation and subject to agreement of the job counsellor that the training would help them in the labour market, they can participate. This makes it likely that there will be differences between participants and non-participants. Simply comparing the labour market outcomes of participants to non-participants may reflect some of these innate differences, rather than the effect the training has had on their success in the labour market. Because there was no trial period prior to full-scale implementation of these programmes, where eligibility was restricted, or other kind of randomisation in participation, quasi-experimental techniques need to be used to evaluate the impact of these programmes.

In order to account for and remove potential differences between participants and non-participants in LMT and SMT this report uses propensity score matching. This technique uses detailed information on individuals to determine which characteristics are important in explaining who participates in the training. Once this has been determined, it is then possible to compare participants to non-participants that, based on their background characteristics, look similar to the participants. In this way, impacts that are not due to the training are removed and only the effects of training on labour market outcomes are left.

1.4.2. Comprehensive linked administrative data underpin the analysis and allow to look at different labour market outcomes

The analysis in the report uses Statistics Finland "off-the-shelf" administrative datasets, which offer excellent research possibilities. These datasets are comprehensive in the number of different dimensions they cover, as well as in the full coverage of the Finnish population. The data include unemployment spells, participation in ALMPs, earnings histories, previous occupation and industry of employment and detailed socio-economic data, including educational attainment, age, gender, native language, marital status, presence and age of children in the family, dwelling and tenancy status.

These data enable the assessment of several different outcomes. It is possible to look at impacts on employment, annual earnings, monthly wages and unemployment duration. In addition to this, the availability of occupational information permits an investigation into how training programmes affect progression on the "occupational ladder". An occupational index is constructed, which utilises information on average earnings in each occupation and allows occupations to be ranked depending on their average earnings. This index allows a tractable investigation into whether and how training programmes affect jobseekers' mobility within this distribution. This provides insight into how occupational choices are affected in addition to earnings and thus greater evidence is generated on the mechanisms by which these programmes affect job matching.

1.5. Self-motivated training and labour market training help connect people with jobs

1.5.1. Self-motivated training and labour market training are the two main training programmes for jobseekers in Finland

SMT and LMT are the two primary training offers for jobseekers in Finland. In 2022 there are over 50 000 jobseekers receiving unemployment benefits participating in this training.

LMT consists mostly of traditional vocational training and is open to all jobseekers. The acceptance into LMT depends on the TE Office that determines whether candidates have the characteristics required to participate and whether the training will address a gap in their skills. Participants are selected using a mixture of the information provided in their application, interviews and aptitude tests. Training can also contain an initial training period, to determine participants' suitability for continuing in the training in LMT. A team of experts from the TE Offices and a representative of the training provider makes selection decisions. An employer representative may participate if they are part of planning and funding the training in question. LMT was the main training offer for jobseekers in Finland until the introduction of SMT in 2010, which allowed jobseekers to study in degree-level programmes whilst retaining unemployment benefits for up to two years.

SMT allows jobseekers to enrol in longer formal full-time courses that are part of the general education system provided by OKM, with the aim of obtaining a degree. The TE office needs to assess that the individual has need for the training and that it is the best way to improve their employment opportunities. If this is the case the individual can continue receiving the unemployment benefit for a period of up to 24 months while studying. Jobseekers must be 25 years or older to participate in this training, though this restriction is relaxed for those participating under the Integration Act (such as migrants accessing basic educational training). There is a requirement for monitoring of progress on the studies to continue receiving unemployment benefit, which is conducted by the state insurance fund, KELA, or the individual private unemployment insurance funds. In 2022 reforms to SMT introduced a requirement for participants to apply for three jobs per quarter, therefore introducing conditionality back into this educational pathway. This

effectively removes the possibility of using SMT as a means to complete education whilst retaining unemployment benefits.

LMT and SMT offer somewhat alternative forms of education to jobseekers. The intensity and amount of educational content of the courses is one of the main differences. This can be clearly seen when looking at course duration. Between 2014 and 2018 the median duration for LMT was 43 days, whilst for SMT it was 341 days.

1.5.2. Self-motivated training and labour market training attract different types of jobseekers that are not representative of the rest of the registered unemployed

Both programmes attract younger jobseekers relative to the pool of all registered unemployed people. However, the average age of participants in SMT is even lower (by two years) than that of LMT participants. In addition, women are slightly less likely than men to participate in LMT while they are significantly more likely than men to enter SMT. On average SMT participants have more children while LMT participants are more likely to be foreign nationals and less likely to speak Finnish.

For both programmes the educational level of participants is slightly higher than for other unemployed persons as they are less likely to have an upper-secondary level education at most. The fields of the highest level of education attained by jobseekers prior to unemployment differ considerably between participants in the two programmes. Arts and humanities degrees are overrepresented, while engineering diplomas are underrepresented among SMT participants. The opposite is true for LMT beneficiaries who are also more likely to possess an information and communication technology degree. While no differences stand out in terms of the profession of the job held before unemployment between LMT participants and other unemployed persons, SMT participants are more likely than other jobseekers to have worked in the service and sales industry and less likely in craft and related trades.

Regarding past unemployment history, SMT participants have spent fewer days and periods in unemployment over the past (two) year(s) than other unemployed persons. For LMT participants no significant difference is observed.

The characteristics of participants in LMT and SMT do not clearly indicate that groups which are close or further from the labour market are more likely to participate in the programmes. For instance, LMT participants are less likely to have a low educational level but are also more likely to lack language skills. Therefore, this descriptive analysis does not raise strong concerns for creaming, which would exist if LMT or SMT participants would have better employment prospects than other unemployed people, even without their participation in the training programmes.

1.5.3. Self-motivated training helps jobseekers become employed in the long term, but with slight negative effects on earnings and upward occupational mobility

The analysis in this report focuses mainly on SMT and LMT that last at least three months. The results of the counterfactual impact evaluation (CIE) show that SMT has a small positive and statistically significant effect on employment three years after the start of the programme. At this point individuals that participate in this programme are 1.4 percentage points more likely to be employed. In contrast to the impact on employment probability, SMT has no significant positive effects on earned income. The year the programme starts, the effect of this programme on earnings reaches its lowest level representing a loss of EUR 855. This negative effect diminishes over time and does not become positive three years after the start of the programme.

These not so positive results on employment and earnings three years after the start of the programme reflect the so-called “lock-in” effect. In fact, since individuals that participate in SMT are not actively looking for a job and might not be willing to accept a job offer until obtaining their target degree, they are less likely

to find a job than their unemployed counterparts that do not participate in training. The lock-in period observed for SMT in this evaluation is between two and three years. It is consistent with the fact that SMT can last up to 24 months supported with unemployment benefit (and may continue after this without unemployment benefit receipt), while classical labour market trainings are usually shorter. When the period of observation of the analysis is expanded to measure the impact of SMT on a sub-sample of unemployed four years after the start of the programme, the effects on the employment probability are twice as high as the previous year and the effect on earnings is positive but statistically non-significant.

SMT participation increases the probability of changing occupations, but participants seem to be moving down the occupational ladder. Individuals that participate in SMT end up in occupations ranked 0.6 percentage points lower (and paid EUR 25 less per month) than their initial occupation compared to their control counterparts.

1.5.4. Labour market training helps individuals become employed but the evaluation results detect no impact on upward occupational mobility and earnings

The analysis in this report shows that LMT programmes that last at least three months improve the likelihood of participants finding a job. Two years after the start of the programme jobseekers who participate in LMT have a higher chance of being employed. The effect on employment found in the long term (three years from the start of LMT) is of 4 percentage points and is consistent with the effects found in the international literature. The lock-in effect of LMT thus lasts between one and two years. This shorter lock-in effect compared to SMT is partially explained by the fact that LMT have shorter durations.

Three years from the start of the training, the effect of LMT is not statistically different from zero for the two measures of job quality studied: earnings and upward occupational mobility.

1.5.5. The programmes shift the distribution of occupational quality from bottom and top occupations to occupations in the middle of the distribution

SMT and LMT do not exhibit positive effects regarding upward occupational mobility. However, this average effect does not provide detailed information on how SMT and LMT affect the shape of the distribution of occupations. A null average effect could come from an absence of change along the distribution, but different tails of the distribution could also be disproportionately affected. The analysis in this report looks at the changes in the distribution of the occupational index, for individuals who participated in the programmes compared to similar individuals who did not. It shows that both SMT and LMT generate important changes in the distribution of occupations.

For both programmes, the null average effect on occupational mobility hides a decrease in the frequency of bottom and top occupations in favour of occupations in the middle of the distribution. Therefore, even if the programmes do not improve the quality of jobs on average, they contribute to reducing inequalities in job quality leading to a more concentrated distribution of occupational quality.

1.5.6. Women and older jobseekers exhibit larger gains in terms of employment and income from participating in self-motivated and labour market training

The effect of the two programmes varies across different subgroups of the population. For both SMT and LMT, the heterogeneity of the effects goes in the same direction for gender and age. Women seem to benefit more from the two programmes in terms of employment and income than men do. Three years after the start of the programme, women who entered SMT are 4 percentage points more likely to be employed and earn on average EUR 104 (over the year) more than similar women who did not participate (against -2 percentage points and EUR -248 for men). Regarding LMT, the estimates for women are respectively 6.2 percentage points and EUR 146 (against 2.5 percentage points and EUR -55 for men).

These results echo the international evidence which shows that programmes targeted at women are more effective than the average programme or programmes targeting men. Regarding gender, SMT is indeed attracting jobseekers more likely to benefit from it since women are more likely to participate, but the opposite is true for LMT.

The results also vary with age, the highest programme effects on employment and income in both programmes are found for older individuals (50 and above). For both LMT and SMT the estimates on this sub-group of the population rise to around 19 percentage points and EUR 400 respectively. However, despite significant gains in terms of employment and earnings, older individuals participating in these training programmes move down the occupational ladder.

The effects of SMT on earnings and upward occupational mobility are negative for jobseekers with an education level above upper secondary. Highly educated SMT participants earn EUR 218 less and end up in occupations ranked 3.4 percentage points below their initial occupation compared to their control group counterparts.

All in all, these heterogeneity results highlight the importance of encouraging the groups of the population that are more likely to benefit from it to increase their participation in the programmes. Further analysis is needed for groups that are adversely affected by participating in LMT and SMT. For example, they might benefit from participating in certain modules of training or training in certain fields only, but the data available for the current analysis did not enable to explore these questions. Furthermore, some groups, such as highly-educated jobseekers might benefit more from other ALMPs than degree or occupational training altogether, such as better support for job search and placement.

1.5.7. Longer labour market training programmes exhibit better results in the long term

LMT training is quite heterogeneous in terms of its duration, therefore it is important to examine the extent to which trainings of different durations may impact differently labour market outcomes of participants. The evaluation results show that for longer LMT, the negative lock-in effect at first is bigger while the effects on employment and earnings later on also increase. Thus, longer LMT courses seem to be more effective than shorter ones in raising the likelihood of employment and earnings. More information is needed on the content of LMT in order to understand what makes longer programmes more effective. Furthermore, a cost-benefit analysis could complement this evaluation by shedding light on whether the positive effects of these programmes are sufficient to offset their cost.

1.6. Self-motivated training generosity can help jobseekers relative to the study subsidy

1.6.1. It is not possible to establish whether or not self-motivated training changed training participation for jobseekers relative to the situation when only labour market training was available

An investigation into whether the introduction of SMT helped to improve outcomes for jobseekers, by widening the educational pathways available to them (relative to LMT only) was hindered by its implementation method. SMT was introduced across Finland simultaneously in 2010. This means it is not possible to look at variation in access across individuals to analyse how this introduction affected training participation of jobseekers. It was also a period of relative labour market flux, coming very soon after the global financial crisis. An attempt is made in this report to compare across two years immediately prior and post SMT introduction. However, robustness checks against unemployed non-participants groups in the same years, which should not have displayed impacts, highlight that potential effects from the economic cycle are confounding this analysis.

Due to the nature of SMT, which is driven by voluntary participation by individuals, it is not possible to compare variation of the intensity of SMT use across regions or TE Offices because any variation is likely to be driven by individuals themselves, rather than any sort of rationing or selection by the individual offices or regions. In order to determine how the introduction of SMT affects take-up and outcomes of individuals (either via encouraging individuals who may not otherwise have taken any training, or by enabling jobseekers to participate in longer training), a randomised trial would be necessary in order to isolate the impacts that are solely caused by the introduction of SMT. At present this may not be possible due to constitutional requirements.

1.6.2. There is some evidence that self-motivated training participants enjoy better long-term outcomes relative to those participating in training with the less generous study subsidy

Before 2010, a jobseeker could study for a degree and receive the study subsidy from KELA. A full-time student did not have a right to unemployment benefits and only those part-time students judged to have sufficient availability for full-time work would be eligible. Today, for a single individual aged over 18 and living alone this study subsidy is EUR 268 per month (against basic unemployment assistance of EUR 594, after provisional income taxes have been applied). SMT introduced the possibility of retaining unemployment benefits for up to two years whilst continuing in further education without having to satisfy any job seeking conditions (although this legislation was amended in 2022, to introduce some jobseeking requirements for individuals studying in this manner). There, SMT made it more financially advantageous for jobseekers to undertake such studies. This raises questions as to whether SMT encourages unemployed people to take up education, whether it improves labour market outcomes by providing greater financial assistance for individuals to finish education or whether the same outcomes could have been achieved with the less costly public funding option to support these educational pathways with the study subsidy.

To address this question, individuals undertaking SMT are compared to similar individuals using the study subsidy to continue their studies. The analysis in this report provides tentative evidence that those using SMT were more likely to enjoy better employment and earnings four years after enrolling in education. However, the small sample sizes involved mean it is challenging to be definitive about this.

The fact that study subsidy use is concentrated at lower ages, with an average participant age of 22, and SMT is undertaken more by prime-age people (on average 35 years old) who have already a family to support, indicates that SMT is appropriately targeted and offers these slightly older jobseekers a route in which they are more likely to gain education that affords them better long-term labour market outcomes.

Key policy recommendations

Strengthen the role of the Ministry of Economic Affairs and Employment as the driver for evidence-based policy making in the field of ALMPs

- Establish a long-term strategic view on research and evaluation activities in the Ministry of Economy and Employment (TEM) to manage and develop the analytical capacity and ensure continuous improvement in evidence-based policy making. In addition to specific research projects in the annual plan, the longer-term strategy should outline the objectives and priorities of research activities in the long term, and the milestones to reach the objectives, considering both internal capacity and contracting out.
- Allocate more resources to build the internal analytical and research capacity in TEM, preferably by hiring additional economists to conduct these functions full time. Additional skilled staff would enable some impact evaluations of ALMPs to be conducted in-house. This would help to close evidence gaps and increase the capacity to design research projects for contracting out. It could improve communication with external researchers, control research quality and feed research results into policy design.
- Establish systematic communication practices between analysts in TEM and policy makers, policy implementers and the broader public. The content and channels of communication need to be defined based on the specific audience, for example, by putting more focus on policy design elements in communication with policy makers.
- Extend the tasks of the Finnish Council of Regulatory Impact Analysis (FCRIA) to monitor that all relevant evidence available has been used as inputs in the draft legal proposals. As a key priority, the FCRIA could check whether the research results of the inter-ministerial research instrument VN TEAS have been considered. Furthermore, the FCRIA and the VN TEAS should exchange information on on-going research projects and assessments of draft legislation to avoid a major legal change taking place while the evidence generation is still in progress.

Ensure sound evidence on ALMPs

- Involve external researchers more in designing research projects to be conducted internally in TEM, and in designing major trials and pilots regardless of whether the evaluation would be later contracted out or not.
- Allocate sufficient time in TEM's contracted-out research projects for researchers to be able to access relevant data and raise awareness on the feasible timelines for credible evidence generation among policy makers.
- Consider applying a peer review process by external researchers for the key research projects that TEM conducts internally to enhance overall quality. Internal analysis with external peer reviewing could be used when the evidence needs to be generated quickly, as TEM has then better control over data access, the timeline for evidence generation, and the research costs.
- Extend the use of pilots and trials of ALMP designs, (digital) tools for employment services and business models for ALMP provision before nation-wide rollout to fine-tune the design and increase confidence in programme effectiveness, as well as have more credible inputs for future ex-ante evaluations.
- Conduct cost-benefit analyses systematically in addition to impact evaluations to demonstrate the value added of different ALMPs more explicitly and understand whether the funding invested in ALMPs could generate benefits for the society exceeding the investments.

Use the reform to PES services to build evidence and improve performance and outreach

- Ensure evidence building is embedded in the two major ALMP reforms. A comprehensive research strategy is essential to properly assess whether the reforms have met their objectives and deliver value-for-money to government and taxpayers. In addition, consider the use of small-scale trials to deviate from the new operating model and build further evidence.
- Clearly define the responsibilities to be transferred to municipalities, their freedom in operating models to implement ALMPs and the support to be provided centrally, before developing the new national IT infrastructure to support the new set-up and ensure data collection for analysis and research purposes.
- Strengthen PES outreach by building links between local employment services and other institutions providing services. Reviewing how municipalities engage and contact jobseekers may allow for extra learning and innovation between municipalities.

Improve data coverage, quality and availability for analysis and research on ALMPs

- Set up systematic dialogue between TEM and the KEHA Centre to develop the IT infrastructure for the new institutional set-up and provide the KEHA Centre with sustainable funding to fulfil its tasks. Involve employment counsellors and municipalities in the planning, development and testing of the new IT platforms.
- In addition to the careful design of data exchange and integration of IT infrastructure between the core stakeholders of ALMP provision, data exchanges with other administrative registers need to be strengthened to support employment counsellors, jobseekers and employers, as well as to ensure data accuracy. Regulations need to be revised and amended to enable data exchange relevant for operational purposes.
- Continue investing in a data analytics system that provides monitoring reports and dashboards for municipalities, TE Offices and employment counsellors to manage their work and caseloads, ELY Centres to steer TE Offices and regional ALMP provision, TEM to govern the overall ALMP system, and the public to gain knowledge on ALMPs interactively.
- Modernise the IT infrastructure further across the public sector in Finland to ensure better data quality in the registers, to better prepare operational data for data analytics and to establish more timely and frequent automatic data exchanges, including with Statistics Finland. Extend the availability of cost data for Statistics Finland on services, measures and benefits across the public sector to facilitate conducting systematic cost-benefit analyses.
- Consider funding (part of) the research services of Statistics Finland sustainably from the state budget to cut the data application processing times and cap research data prices to support evidence generation across policy fields and encourage research not only tied to a current political agenda.
- Request researchers conducting projects for TEM to share the programming codes used to conduct the research and publish these together with the reports discussing the results to avoid duplication in data preparation activities, conduct research projects more efficiently and establish an additional quality assurance, as the exact methodology would be more transparent for the research community.

Target SMT and LMT to groups more likely to benefit from them and redesign these programmes for those groups who do not benefit currently

- Improve SMT and LMT effectiveness by targeting them to those groups which benefit from them the most, notably older jobseekers aged 50 and above and women.
- Continue re-designing SMT and LMT to improve the labour market outcomes of groups that are not yet experiencing the beneficial effects of these measures. This is of particular importance for individuals below 30 years old who are overrepresented in those programmes. Explore new features to re-shape the programmes and adapt them to the needs of youth, for instance by learning from youth work best practices (i.e. mentoring, project-based learning, etc.).
- Analyse which ALMPs would better support those groups for which LMT and SMT have adverse or weaker effects and adjust targeting accordingly. Above all, consider better job search and placement services for highly-educated people with low job search skills.
- Extend skill mapping of jobseekers and vacancies within the job mediation platform "Job Market Finland" to better target training to cover skill gaps.
- Continue evaluating SMT in the coming years to enable observing its effects on labour market outcomes beyond the three-year-threshold to better understand its long-term effects across sub-groups of jobseekers.

Exploit SMT and LMT as tools to promote labour mobility and reduce labour market shortages while taking into account job quality

- Strengthen the targeting of these programmes towards sectors and occupations that are experiencing labour market shortages to support labour mobility and reduce labour market mismatch.
- Ensure labour mobility through upskilling and reskilling policies does not come at the expense of job quality. Consider complementing the Occupational Barometer with information on job quality indicators to guide jobseekers to bottleneck occupations of higher quality and higher value-added for the Finnish economy.

2 The labour market and active labour market policies in Finland

This chapter sets out some of the key trends in the labour market in Finland and reviews some of the features of the system of provision of active labour market policies (ALMP). This is important context for how the training provided to jobseekers helps to connect them with jobs. The chapter documents the responsibilities of the key institutional stakeholders in the ALMP system and how they interact to provide services for jobseekers. Upcoming reforms to the ALMP framework of support for jobseekers are also discussed.

2.1. Introduction

The labour market in Finland has higher employment and labour market participation than other OECD countries but suffers from higher unemployment. Compared to its Nordic neighbours, improvements could also be made to further increase employment and reduce unemployment and inactivity. Finland provides a generous mix of active labour market policy, but outreach from its public employment service could be enhanced to connect more people with good jobs. A mix of stakeholders implement active labour market policies (ALMPs) and a forthcoming transfer of power to municipal bodies is designed to align incentives and improve outcomes. This sits alongside a "Nordic" reform to activation policy that will increase contact between the public employment service (PES) and jobseekers, with an increasing emphasis on job search.

The next section presents the main labour market trends and identifies the challenges that Finland continues to face. The following section provides an overview of the system of ALMPs and the final section discusses the ongoing and planned reforms in the areas of ALMPs and PES.

2.2. The Finnish labour market

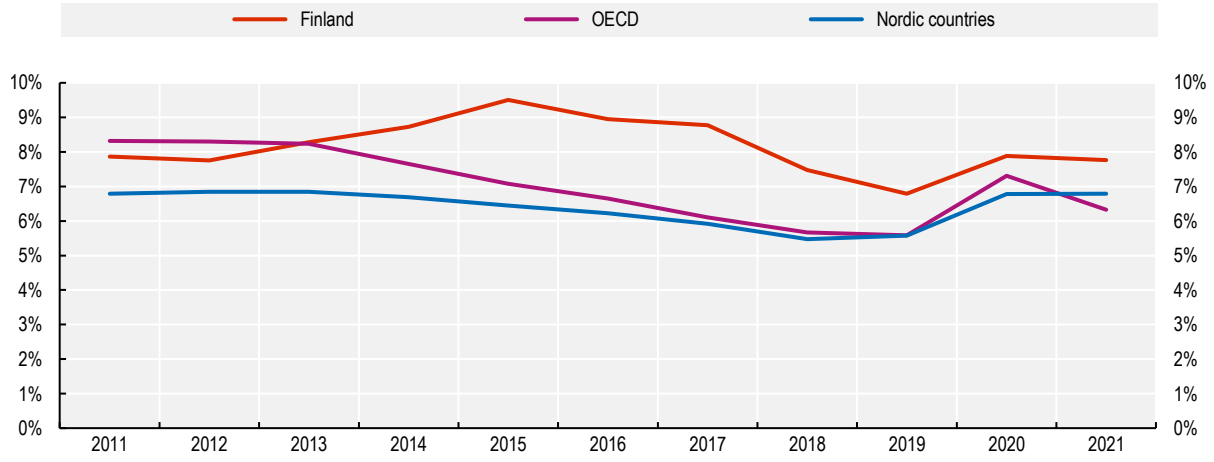
This section reviews some of the key features of the labour market in Finland, setting them in context of other OECD countries. It covers key labour market indicators such as the employment, participation and unemployment rates, before looking further into whether different groups of individuals are affected differently by these broader trends. It goes on to review ALMP spending and its composition in Finland and how stakeholders work together to deliver these services and programmes, before briefly summarising two key current reforms to the system of ALMP delivery in Finland that will significantly alter this delivery.

2.2.1. Relatively high levels of unemployment characterised the Finnish labour market over the past decade

Over the last decade, Finland's labour market has been characterised by higher levels of unemployment relative to the OECD average. In the decade up to 2021, Finland's annual unemployment rate averaged 8.2% compared to an OECD average of 7% (Figure 2.1). When compared to its Nordic neighbours, its unemployment is relatively higher still, with Nordic countries (excluding Finland) having unemployment rates averaging 6.4% over the same period. Finland, the OECD and Nordic countries have seen continued improvements in unemployment rates as economies have moved into 2022. In 2022 Finland's unemployment rate decreased to 6.9%.

Figure 2.1. Finland's unemployment rate averaged 8.2% in the decade to 2021, against an OECD average of 7%

Annual unemployment rates 2011-2021



Note: OECD and "Nordic countries" (Denmark, Iceland, Norway, Sweden) are weighted averages.
Source: OECD dataset LFS by sex and age – indicators, http://dotstat.oecd.org//Index.aspx?QueryId=54218.

StatLink https://stat.link/04mo6e

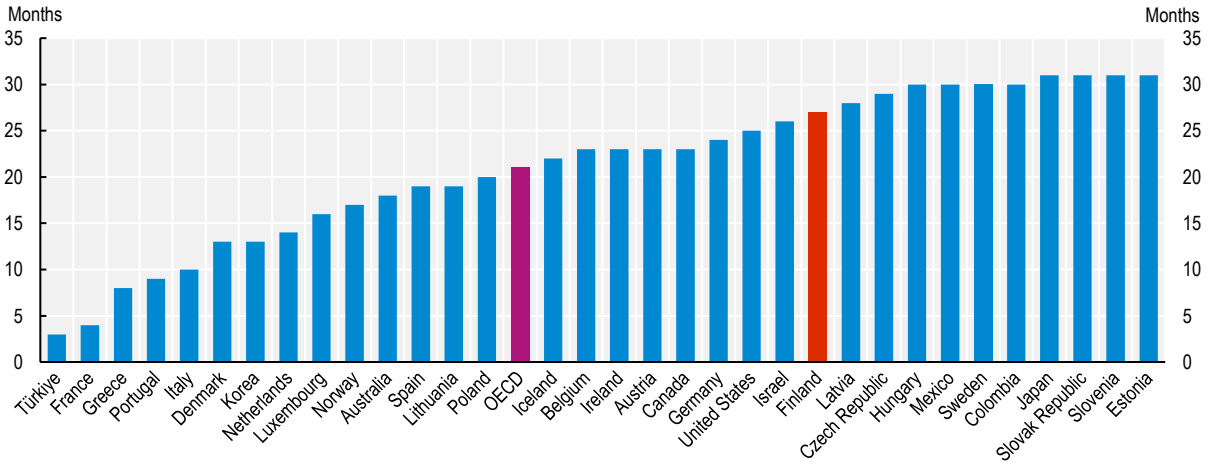
Unemployment took longer to return to pre-COVID-19 levels, but overall employment and labour force participation are high

The slower short-term recovery to unemployment rates in Finland is mirrored when considering the broader recovery from COVID-19. Finland took 27 months to return to its pre-COVID-19 unemployment rate, six months longer than the OECD average of 21 months (Figure 2.2). By July 2022, Finland and Estonia were the only two OECD countries to have unemployment rates more than 0.5 percentage points above their pre-COVID-19 rates (OECD, 2022[1]).

The relatively high and persistent unemployment rate in Finland must be set in context of its overall employment and labour force participation rates, which are above the OECD average. In 2021, Finland's employment rate of adults aged 15-64 was 73%, which is 5 percentage points higher than the OECD average (Figure 2.3). This figure is also reflected in its labour force participation, defined as the labour force divided by the working age (15-64) population. In 2021, Finland's labour force participation was 79%, 6.6 percentage points higher than in the OECD as a whole (72%). This strong performance continued into 2022 with labour force participation increasing to 79.3% and the employment rate increasing to 73.8%. All in all, Finland does well in ensuring its citizens are actively engaged with the labour market but has room for improvement in helping those people without work connect with jobs.

Figure 2.2. Unemployment took longer in Finland to recover its pre-COVID-19 unemployment rate compared to the OECD average

Number of months from December 2019 for each country to return to the unemployment level in that month

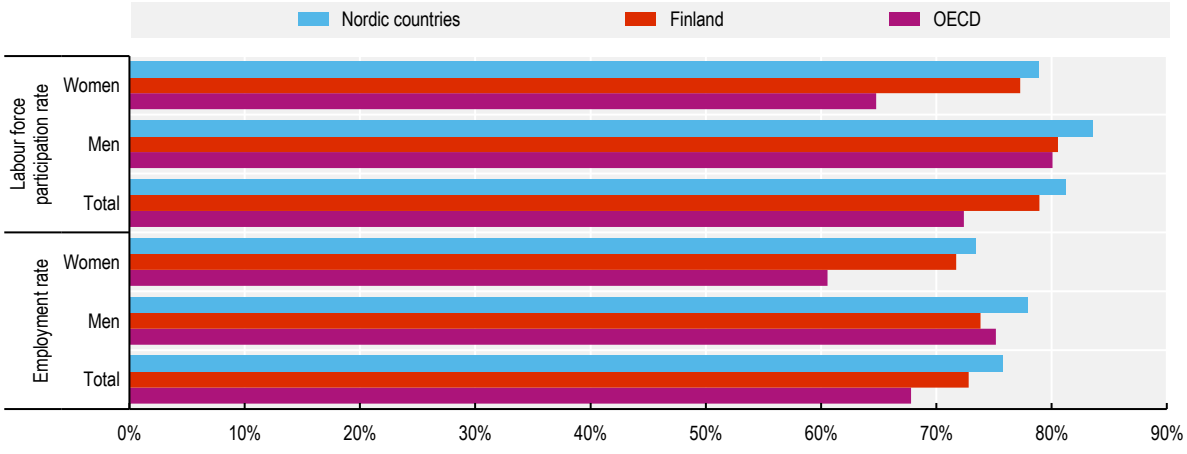


Note: OECD represents the unweighted average of the 33 countries shown. Countries with a value of 31 are still above their pre-COVID-19 unemployment rate.
Source: OECD Short-term Labour Market Statistics, https://stats.oecd.org/index.aspx?queryid=35253.

StatLink https://stat.link/ihqajc

Figure 2.3. Finland has high employment and labour force participation rates compared to the OECD average

Employment and labour force participation rates by gender, 2021, persons aged 15-64



Note: OECD and "Nordic countries" (Denmark, Iceland, Norway, Sweden) are weighted averages.
Source: OECD dataset LFS by sex and age – indicators, http://dotstat.oecd.org//Index.aspx?QueryId=54218.

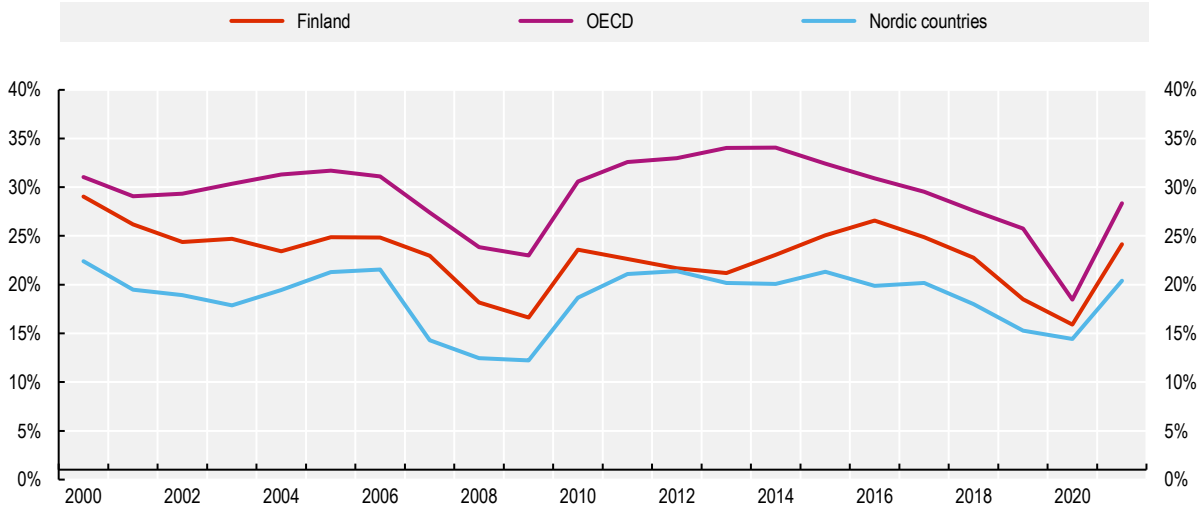
StatLink https://stat.link/y3gsu6

Long-term unemployment is high relative to other Nordic countries

Individuals unemployed for one year or more made up 24.2% of total unemployment in Finland in 2021, relative to only 20.4% for other Nordic countries, yet well below the 28.4% for the OECD as a whole (Figure 2.4). This is unlikely to be due to underlying benefit generosity, as replacement rates in Finland are similar to other Nordic countries (OECD, 2022[2]). The share of jobseekers with durations over six months is similar between Finland and other Nordic countries, meaning that the problem lies in a lower probability of exiting from unemployment at longer benefit durations. In this context, it is important that the PES has a suitable set of ALMPs to help individuals that are less connected with the labour market to find jobs, alongside an effective engagement and co-operation with other institutional stakeholders providing education, health and social services.

Figure 2.4. Finland has a higher share of long-term unemployed compared to other Nordic countries but is below the OECD average

Share of unemployed who have been unemployed for one year and over, 2000-21



Note: OECD and "Nordic countries" (Denmark, Iceland, Norway, Sweden) are weighted averages.
Source: OECD Unemployment by duration dataset http://dotstat.oecd.org//Index.aspx?QueryId=9594.

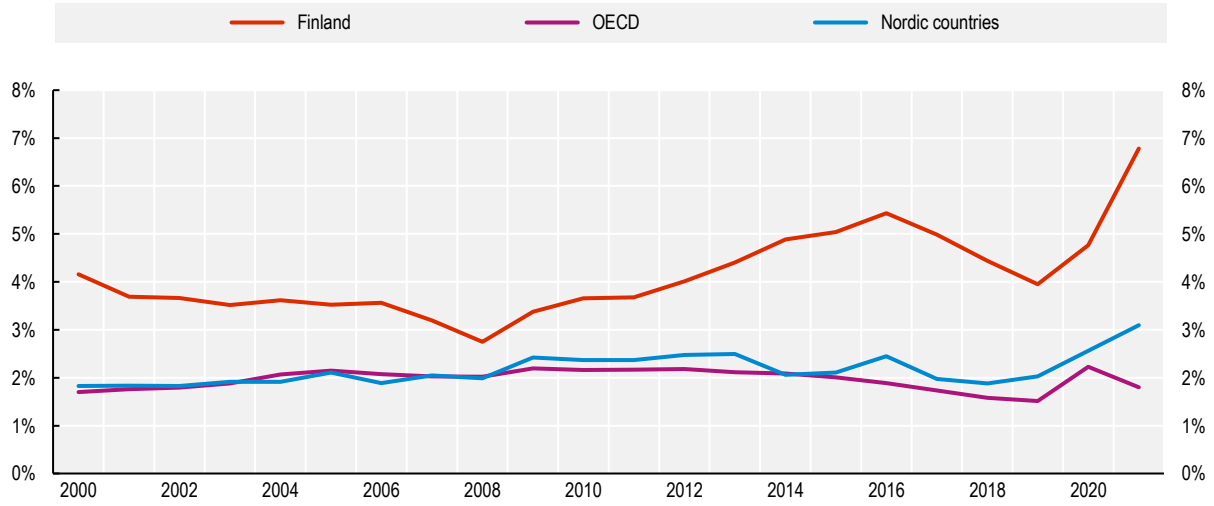
StatLink https://stat.link/3v168e

Finland also has a high volume of individuals with weak labour market attachment

Finland has a large number of individuals who are not actively looking for work but who would be willing to take work. These individuals are classified as "marginally attached" because despite not actively seeking work, they have done so in the last year and would be willing to take work if it was offered. Relative to the size of its labour force, Finland has a higher number of marginally attached workers compared to other OECD countries (Figure 2.5). In the five years preceding 2021 Finland's rate of marginally attached workers, at 5%, was almost three times higher than the OECD average of 1.8%. Despite improvements between 2016 and 2019, the onset of COVID-19 has served to re-open the gap, and Finland's rate of 6.8% in 2021 was some 5 percentage points higher than the OECD average.

Figure 2.5. Finland has twice the rate of marginally attached workers relative to its OECD and Nordic peers

Share of marginally attached workers, 2000-21



Note: Marginally attached workers are persons aged 15 and over, neither employed, nor actively looking for work, but are willing/desire to work and are available for taking a job during the survey reference week as a share of the extended labour force (labour force + marginally attached workers). OECD and "Nordic countries" (Denmark, Norway, Sweden) are weighted averages. OECD excludes Colombia, Costa Rica, Iceland, Korea, Mexico and the United States for which no data are available.
Source: OECD Incidence of marginally attached workers dataset, http://stats.oecd.org//Index.aspx?QueryId=37636.

StatLink https://stat.link/96mw31

2.2.2. Large labour market disparities exist between different groups of population

This section reviews disparities in labour market outcomes between different groups in the population, defined by gender, age and education.

There is a mixed picture on gender gaps in the labour market for Finland

The gender gap in employment and participation rates, whilst still present, is lower in Finland than for OECD countries in general. Figure 2.3 shows that in 2021, the female employment rate in Finland was 71.7%, well above the OECD average of 60.5%, but still slightly below the rate of other Nordic countries at 74.3%. However, the employment rate is relatively worse for men, which sees Finland below both OECD and Nordic countries. The male employment rate in Finland in 2021 was 73.8%, against 75.2% for the OECD.

The picture is similar when looking at labour force participation. In 2021, the female participation rate was 77.3% in Finland, 12 percentage points above the OECD average, but 2 percentage points lower than other Nordic countries.

Contrary to OECD countries and the Nordic countries, Finland has lower unemployment rates for women (7.2% in 2021) compared to men (8.3%) (Figure 2.6).

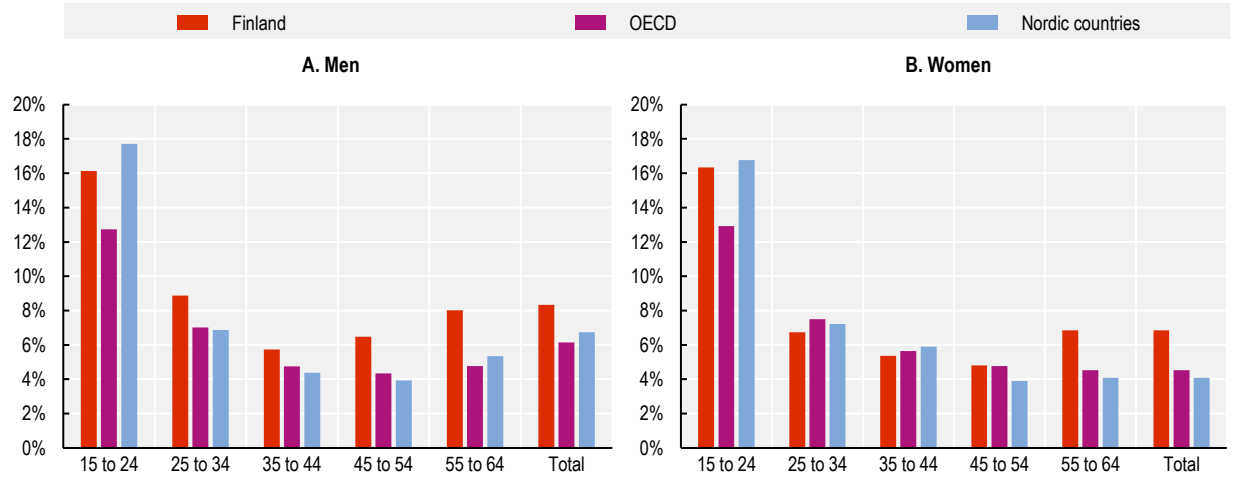
Unemployment is relatively higher for younger and older individuals

The age profile for unemployment in Finland is similar to the OECD in general, though older jobseekers fare relatively worse and the dynamic is more pronounced for men. In 2021, unemployment rates for men and women aged 15-24 in Finland were similar at around 16%. This is higher than the OECD average but reflects a similar trend to overall unemployment in Finland (Figure 2.6)

For men and women aged 55-64, unemployment in Finland is also significantly higher than OECD countries. The unemployment rate for men in Finland in 2021 was 8%, a full 3.2 percentage points higher than OECD countries. The unemployment rate for women was 6.8%, 2.3 percentage points higher than OECD countries.

Figure 2.6. Both younger and older people in Finland face high rates of unemployment

Unemployment rates by age and gender, 2021



Note: OECD and "Nordic countries" (Denmark, Iceland, Norway, Sweden) are weighted averages.
Source: OECD dataset LFS by sex and age – indicators, http://dotstat.oecd.org//Index.aspx?QueryId=54218.

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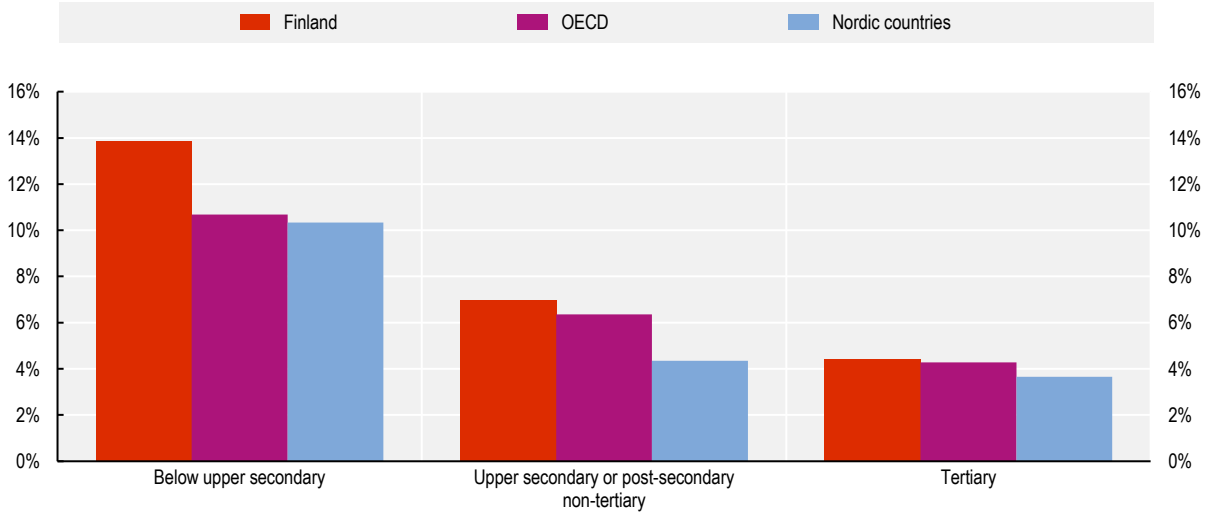
Lower and middle educated jobseekers face higher unemployment in Finland

Finland has higher rates of unemployment for lower and middle educated people compared to other OECD countries (Figure 2.7). For those with a tertiary education, Finland's unemployment rate (4.4%) was almost at parity with other OECD countries (4.3%) in 2021. But the gap for lower educated workers (below upper-secondary education) stands in starks contrast. The unemployment rate for lower educated workers in Finland was 13.8% in 2021, 3 percentage points higher than the OECD average of 10.7%. This suggests that policies that better align skills demand and supply, particularly at lower and middle levels of education, would be beneficial at reducing structural unemployment resulting from mismatches. Making changes to the adult education system to encourage participation of adults with low skills, will be key to unlocking the potential of all individuals. Upskilling individuals, to ensure they have sufficient skills to perform highly skilled jobs is particularly important for Finland, which suffers from a high share of vacancies that are highly skilled occupations, relative to other OECD countries (OECD, 2020[3]). Improving the inclusiveness of Finland's system of adult education will be an important step to driving up results in this regard (OECD, 2019[4]). This is of importance in a world emerging from the COVID-19 crisis, to ensure that vulnerable groups do not become further detached from the labour market (OECD, 2021[5]) and in the context of high numbers of open job vacancies, which were at their highest level for 30 years in 2021 (JOTPA, 2022[6]).

Figure 2.7. Middle- and lower-educated jobseekers face a greater unemployment penalty in Finland

Unemployment rates by education level, persons aged 25-64, 2021



Note: OECD and "Nordic countries" (Denmark, Iceland, Norway, Sweden) are unweighted averages. Education defined by ISCED 2011: Below upper secondary (levels 0-2), Upper secondary and post-secondary non-tertiary- (Levels 3-4), Tertiary (Levels 5-8).
Source: OECD calculations based on the OECD dataset Educational attainment and labour-force status, (http://stats.oecd.org//Index.aspx?QueryId=93191.

StatLink https://stat.link/g93emz

2.3. The system and outreach of active labour market policies in Finland

The previous section illustrates that despite having good participation and employment rates, there are still underlying challenges in Finland to help support jobseekers into work. Unemployment is above the OECD average and there are a number of underlying groups of jobseekers that fare worse than others. In this context, having a set of ALMPs that fit within broader provision of social services and education policy to help these jobseekers into work is essential. This section reviews the composition of ALMP spending in Finland and describes how its main stakeholders interact to deliver these policies. It also contextualises this in the ability of its public employment service (PES) to connect with jobseekers.

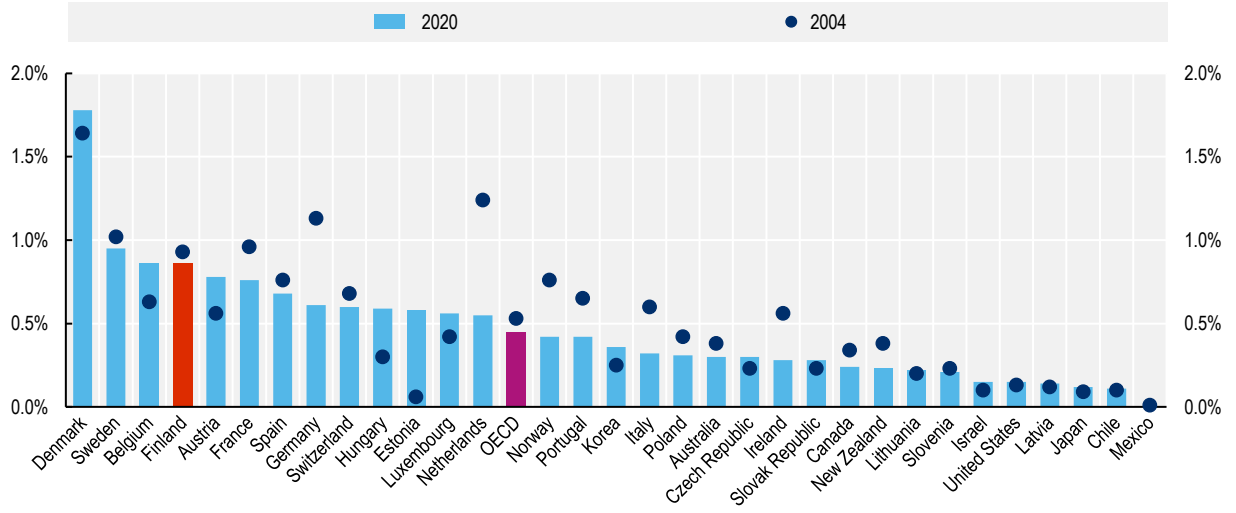
2.3.1. Finland spends generously to support its jobseekers

To support unemployed people, Finland has a relatively generous set of ALMPs. In 2020, its spending on ALMP as a percentage of GDP (0.86%) was lower than that of Denmark and Sweden only, of the 32 OECD countries for which data are available (Figure 2.8). This is a feature that has persisted over time.

This spending is heavily focused on training and direct job creation (Figure 2.9). In 2020, 0.36% GDP in Finland was spent on training and 0.13% GDP on direct job creation. Spending on training, as a proportion of GDP, was only higher in Austria. It also has relatively generous spending on employment policies for people with disability, general placement services by the PES and start-up incentives (0.15%, 0.08% and 0.01% of GDP respectively in 2020). The only exception to this is for employment incentives, where Finland spends less than the OECD average. To support ALMPs, it is important that a complete evidence base exists, so that funding is directed to policies that best help its citizens achieve their ambitions in the labour market.

Figure 2.8. Finland is among the highest spenders on active labour market policies

Spending on active measures as a share of GDP



Note: OECD is an unweighted average of the 32 countries shown. Data for 2020 refer to 2019 (Israel, Korea, New Zealand, OECD). Data for 2004 refer to 2005 (Poland), and to 2008 (Chile, Korea). Employment incentives are net of category 42 (Employment maintenance incentives), to remove as much as possible measures that are specific to COVID-19.
Source: OECD Database on Public expenditure and participant stocks on LMP, http://stats.oecd.org//Index.aspx?QueryId=8540.

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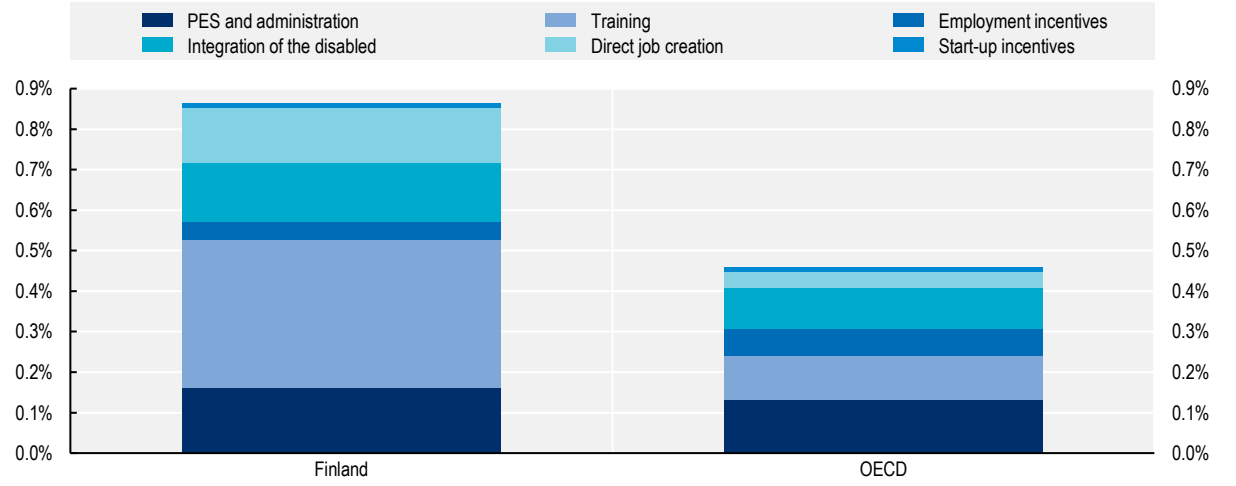
Figure 2.9. Finland spends almost double the OECD average on active measures, especially on training

Spending on active measures as a share of GDP by programme, 2020



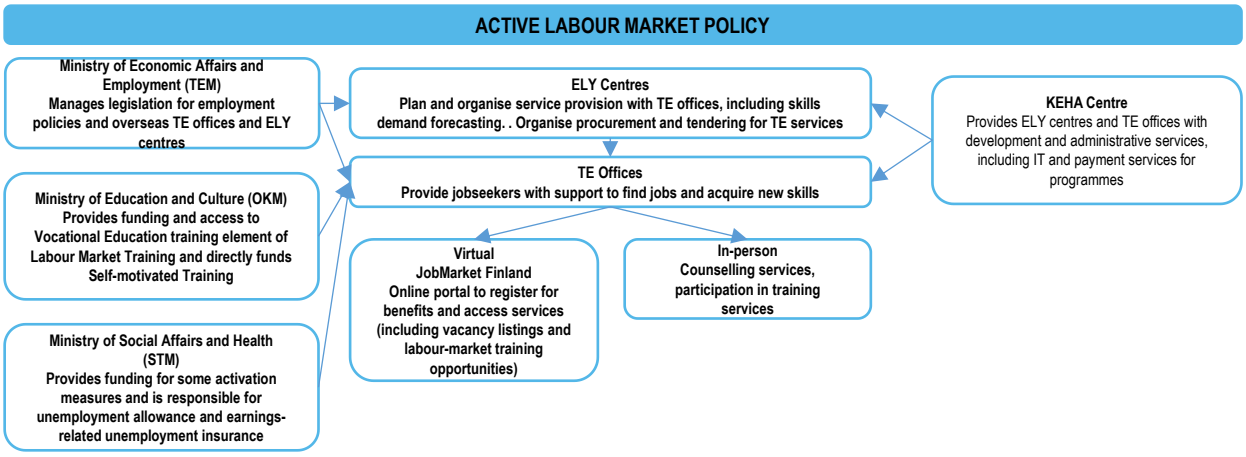
Note: OECD represents the unweighted average of 32 countries, excluding Colombia, Costa Rica, Greece, Iceland, Türkiye and the United Kingdom, and including 2019 data for Israel, Korea and New Zealand. Employment incentives are net of category 42 (Employment maintenance incentives), to remove as much as possible measures specific to COVID-19.
Source: OECD Database on Public expenditure and participant stocks on LMP, http://stats.oecd.org//Index.aspx?QueryId=8540.

StatLink https://stat.link/kj3dn4

2.3.2. A network of stakeholders work together to deliver ALMPs

The provision of active labour market policy in Finland is undertaken by a mixture of government bodies and third-party stakeholders. The main agents are the Ministry of Economic Affairs and Employment (TEM), the Ministry of Education and Culture (OKM), the Ministry of Social Affairs and Health (STM), municipalities, the ELY and KEHA centre, and TE Offices (Figure 2.10). A network of organisations, such as trade union bodies and employer confederations, advocates and negotiates for members rights within this system. This network of interactions can be rather unwieldy and historically there have been recommendations for reform, to reduce the fragmentation within the system, so that responsibilities and accountabilities were clarified and improved (Duell, Grubb and Singh, 2009[7]). The forthcoming reform of employment services detailed in the last section of this chapter attempts to make similar improvements, by streamlining accountability and aligning incentives. It will be important for this process to review and address these areas to ensure the cohesion and efficiency of the system is improved.

Figure 2.10. A range of stakeholders are involved in active labour market policy delivery



Source: OECD visualisation of ALMP stakeholder interactions in Finland.

Whilst the main role of supporting jobseekers is primarily undertaken by the TE Offices in a practical sense and owned by TEM for the main policy development, a number of organisations interact to deliver different aspects of the system. OKM is involved in across two of the main training programmes for jobseekers, either through provision of education directly or via funding and planning. Similarly, there are links between the organisations that provide passive labour market support and the TE Offices in the co-ordination of training policy delivery. Ancillary back-office services like IT systems and procurement are outsourced from TEM and the TE Offices to other government bodies. This means the system has multiple layers in which to ensure that policy is joined up and delivers on joint objectives.

The Ministry of Economic Affairs and Employment (TEM)

TEM is responsible for a broad range of policies across the economy that affect both business and workers. This includes industrial policy, competition policy and the functioning of markets, innovation policy and energy policy. TEM's objectives include the integration of workers, entrepreneurs, students, researchers and trainees in the labour market, which it manages through employment policy and business regulation.

TEM manages and monitors the implementation of public employment and business services (TE services) across Finland, which help businesses to recruit individuals and individuals to search for work, improve their skills and connect to jobs. TE services are designed to improve jobseekers' employment prospects and maximise the supply of a well skilled workforce to support the Finnish economy.

TEM has oversight and strategic control of the Employment and Economic Development Offices (TE Offices), which directly implement the delivery of TE services. There are several social partners who are also involved with provision of services. Enterprises, regional and national business service organisations and educational institutions, third-sector actors, public-sector joint service points, recruitment agencies and private employment exchanges also help to provide these services. TEM owns the policy framework for the TE services and decides on the legislative framework which they, and the associated stakeholders, operate in.

Employment and Economic Development Offices (TE Offices)

TE Offices offer customers a comprehensive selection of various services that support job search and employment as well as business activities. There are 15 regional offices located around Finland.

Jobseekers are predominantly directed to register for TE Office services online, via the JobMarket Finland (*Työmarkkinatori*) website. Registering via this process notifies the social insurance institution, KELA, and the individual unemployment funds, of the commencement of eligibility for unemployment insurance payments.

TE Offices provide a range of activities including provision of information about vacancies, professions and trends in professional sectors, advice and coaching for jobseeking, personal guidance and support for career planning, training for new skills or changing professions, support for re-entering the labour market following life events and information about entrepreneurship. As part of the Nordic labour market reforms that are being introduced, renewed emphasis will be placed upon coaching for jobseeking and applying for vacancies.

Vacancies are posted online, allowing jobseekers to search directly for adverts. A new service called "TE Live"[1] allows jobseekers to connect with existing workers at firms, to ask them directly about working conditions and practices at recruiting firms. Employers have been able to utilise online job vacancies postings for around two decades. A new service updates these existing services to a new portal and introduces new functionality. In May 2022 the Job Market platform introduced artificial intelligence (AI) services to facilitate matching jobseekers to vacancies. A separate portal also allows jobseekers to search for vocational training course vacancies.

TE Offices are part of the local administration coming under the ELY centres. The task of the ELY Centres is to steer TE Offices in achieving their objectives and developing their services. However, KEHA is also involved, the development and administrative Centre for ELY Centres and TE Offices, provides development and administrative services. These include human resources and payment and procurement functions.

Centres for Economic Development, Transport and the Environment (ELY centres)

Finland has a total of 15 ELY Centres, which are tasked with promoting regional competitiveness, well-being and sustainable development and curbing climate change. ELY Centres collect information on the state of their regions' business, environment, and infrastructure and employment opportunities and anticipate future development trends, to support regional decision-making. The ELY Centres belong to the administrative branch of TEM. However, several other ministries are also involved to steer their varying functions.

In terms of support for employment, the ELY centres provide a number of services. Forecasts are produced of long-term regional education and training needs, in co-ordination with regional councils, so that it can help to inform local delivery of ALMP policy by TE Offices. The aim is to ensure supply of education and training is in accordance with the demand for it. ELY Centres aim to promote the smooth functioning of the labour market by supporting TE Offices to develop and co-ordinate employment services that promote employment opportunities and prevent discrimination and social exclusion. ELY Centres make

co-ordinated efforts to ensure that all statutory services are available to all customers of TE Offices. They are responsible for the procurement and tendering of training contracts used by the individual TE Offices.

KEHA centre

The KEHA centre was formed in 2015 and tasked with providing administrative and development support to the network of ELY and TE Offices. It provides services like personnel management, budgeting, payment services for different benefits and IT development, alongside human resources support for the development of staff in TE and ELY centres. It employs around 550 experts to deliver their range of services.

KEHA is responsible for direct payment of several TE services, such as the Start-up grant for entrepreneurs, pay subsidies for employers, rehabilitative work activities and the employment policy project support (discretionary funding support for service procurement, managed by the TE Offices).

One of the most important elements of the KEHA centre's work is the provision of IT infrastructure, to manage the flow of information with TE Offices. The forthcoming change to service provision, detailed later in the chapter, brings challenges to the centralisation and standardisation of these services, as municipalities will be able to diverge in the manner of their own choosing. This risks reversing the system of centralising back office support that the KEHA centre was designed to introduce. The idea for the KEHA centre was to streamline support so that standardised processes could create efficiencies in delivery.

The Ministry of Education and Culture (OKM)

OKM has responsibility for education policy in Finland. This includes two important elements for ALMP delivery- vocational education and training (VET) and higher education. For VET, it has responsibility for funding the element of labour market training (LMT) that falls directly within the remit of VET. LMT is the main vocational training programme available for jobseekers, evaluated in Chapter 6 of this report. This responsibility includes all training that is leading directly towards an accredited qualification. It also includes the granting of education providers permits to provide VET, which are managed and procured by the ELY centres for the TE centres to deliver. It also has the responsibility for higher education and directly funds the education provided to jobseekers under the self-motivated training (SMT) programme. SMT is the other major training programme for jobseekers and allows them to complete degree-level study, becoming an integral part of training provision for jobseekers since its introduction in 2010.

The Ministry of Social Affairs and Health (STM)

STM has responsibility for developing and preparing the legislation on income security for the unemployed. This includes provision of the unemployment allowance and labour market subsidies. However, via its role in the provision of income security, it also contributes directly to labour market activation, as some of its budget on unemployment benefit is deployed on active measures. This includes the mobility allowance; the job alternation leave benefit; direct job-creation in the public sector or employment subsidies for private employers; start-up grants; and rehabilitative work activities.

Box 2.1. Occupational Barometer to forecast occupational shortages

Finland's Ammattibarometri helps labour market actors plan for labour demand

The occupational barometer (OB) was first conceptualised in the Turku ELY centre in 2007 to provide an assessment of occupational demand and supply and was implemented in all ELY centres and TE offices by 2011.

The OB is updated twice year (around the start of spring and autumn)- to provide an updated assessments of occupational demand and supply, and insight into which occupations are in likely to be in shortage or surplus over the next 6 months.

The OB is based upon the assessment of experts within local TE offices, who undertake a workshop in advance of each publication to assess the level of demand and vacancies in their area. Each assessment takes around 2-3 hours to complete.

The OB includes 200 professions included in the International Standard Classification of Occupations (ISCO 4), which together account for just under half of workers.

Reports are available at differing levels of regional disaggregation. This includes nationally, at the level of the 15 ELY centres and for 56 sub-regions. Each regional report provides an estimated demand across occupations in the next six months and estimates the relative balance between supply and demand in these occupations. These indicate whether demand is increasing, decreasing or remaining unchanged and whether any change is fast (effectively a five-point scale). Similarly for the demand and supply balances it classifies shortages, surpluses and whether these are "serious", and in-balance.

Summaries are also produced across geographies to highlight the top 15 occupations in shortage and surplus and include the assessment of the speed of change and "posters" which provide a slightly larger infographic with more occupations and covering both shortage and surplus and in-balance occupations.

ELY centres and TE offices can then use this information to plan the services they offer, including the labour market training they offer and procure for individuals to address these skills gaps.

As of the most recent OB, there were shortages in 56 occupations and the largest shortage existed in the health and social services sectors. Shortages most acute among nurses, social work specialists, early childhood educators and special needs teachers. This continues a similar finding from the spring 2021 update to the OB.

Source: https://www.ammattibarometri.fi/, https://tem.fi/en/-/occupational-barometer-increase-in-labour-shortages-has-slowed-down-but-health-and-social-services-continue-to-ac-count-for-top-shortage-occupations, Marttinen (2012[8]), Occupational Barometer - A Short Term Tool Anticipating the Prospects of Occupations, https://oa.inapp.org/bitstream/handle/20.500.12916/3034/MARTTINEN_Finlad_network_29_nov_2012.pdf.

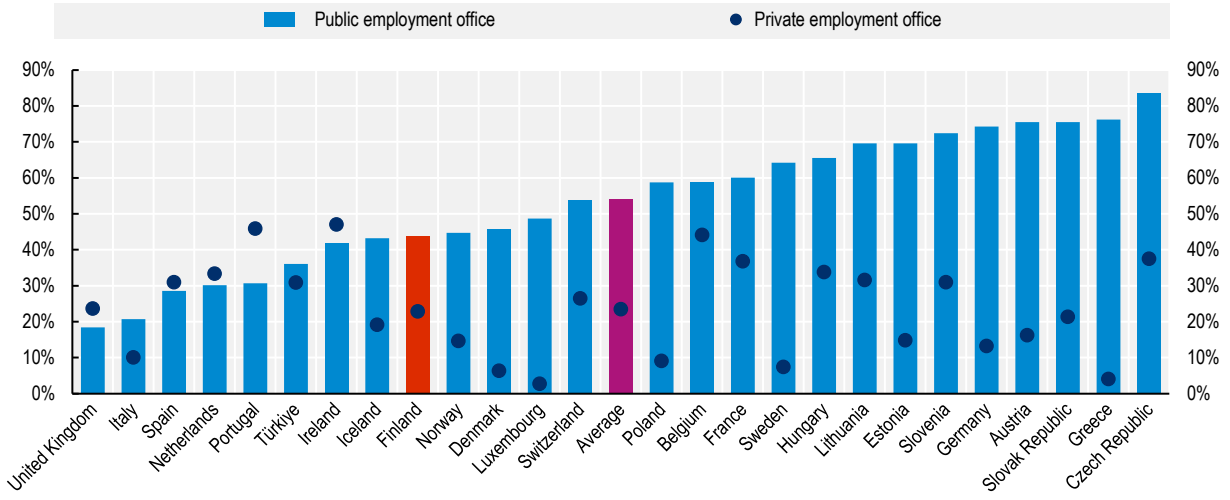
2.3.3. Outreach of PES services could be strengthened

Strengthening the outreach of the public employment service may help to improve job matching for jobseekers but also to strengthen labour market ties for those marginally attached. In 2020, only 44% of jobseekers in Finland contacted the public employment service to search for work (Figure 2.11). Another route to job finding support is via the use of private employment services, however, only 23% of jobseekers sought this route to employment. This means that a relatively large proportion of jobseekers undertake job search completely independently. Therefore, they do not avail themselves of the expertise and infrastructure of support that the PES can provide, either in help for their job search directly or via participation in ALMPs to augment and increase their skills and improve their labour market prospects.

This highlights some of the inconsistency within the Finnish system. When connected to its jobseekers, it has a relatively generous system of support to help individuals acquire skills and connect with jobs, but this co-exists with a large number of individuals who do not take advantage of the support that is available to them and which could help them find good jobs.

Figure 2.11. A lower share of jobseekers contact the public employment service in Finland than in most other European countries

Share of jobseekers (aged 15-64) who declare having contacted the public employment office or a private employment office to seek employment, 2020



Note: The purple bar represents the unweighted average of the 26 European countries shown.
Source: OECD calculations based on the EU Labour Force Survey (EU-LFS).

StatLink https://stat.link/uih6sl

2.4. Ongoing and planned reforms

Finland has embarked on an ambitious programme of reform that aims to improve its framework for delivering employment services. This falls under two strands; a reform which changes how jobseekers interact with employment counsellors with respect to job search and a transfer of power away from central government to local municipalities in the funding and delivery of employment services.

At the heart of both reforms is a change to the incentive structures that underlie the interactions between stakeholders in the system. The reform of jobseekers' obligations on job search in their receipt of unemployment insurance will change the incentives they face, placing greater emphasis on regular job applications to maintain receipt of this insurance. The transfer of power to municipalities will change the underlying incentives municipalities have to implement ALMPs, by broadening their responsibility for payment of unemployment benefits. In addition to payment of the labour market subsidy, municipalities will be responsible for payment of the basic allowance and the share of earnings-related unemployment allowance that corresponds to the basic component. The funding share under the responsibility of the municipalities will also increase as jobseekers spend longer in unemployment. Labour market services have been reformed to increase contact between jobseekers and counsellors.

2.4.1. Reform to the system of interaction with jobseekers

On 2 May 2022, a new customer service model came into force, designed to provide jobseekers with more support, alongside obligations on job search. The reform intends to bring the Finnish system closer to that of some of the other Nordic countries, by increasing support to jobseekers with more time allotted with job counsellors, alongside increasing the requirements on them to search for work. Prior to the reform, Finland's model of support for unemployed jobseekers was comparatively lenient, in terms of the obligations that it placed upon jobseekers, which could result in a removal of benefit if they were not met (Immervoll, Knotz and Otmani, 2020[9]). The objective is for jobseekers to find employment as quickly as possible. TEM estimates that the reform will increase employment by around 10 000 by 2025 (Ministry of Finance, 2022[10]). It is expected that the new reform will have a positive impact on public finances of EUR 230 million (TEM, 2022[11]).

The customer journey prior to the reform

Prior to the reform, jobseekers had little interaction with job counsellors. Registration with TE Offices was completed in person or online. In 2018, 83% of such registrations were completed online. An initial interview with the jobseeker was expected to take place within two weeks of the initial registration. This was not necessarily completed in person and could be completed over the telephone. The first interview consisted of checking and supplementing job seeking information, assessing the need for further services and drawing up an employment plan. The employment plan stipulated the required actions that the jobseeker would undertake in order to search for work. After the initial interview, further interviews were scheduled every three months. These additional interviews were only made mandatory in 2017 and typically lasted between 10 and 30 minutes. There was no stipulation for evidence on job search to be presented, though the TE Offices could ask for it. Usually, it was sufficient that the jobseeker informed the TE Office that the task in the agreed employment plan had been carried out. There were no regulations or guidelines on the specified number of job search actions, but it would be agreed between the jobseeker and the TE Office in the employment plan.

The reform introduces requirements on job applications and fortnightly meetings with counsellors

As part of the reform, jobseekers are expected to apply for work on their own initiative and agree to a personalised plan which includes requirements on expected applications to vacancies. The exact number of required applications differs between jobseekers and is agreed between the job counsellor and the jobseeker in the employment plan but is expected to be between zero to four applications per month (Ministry of Finance, 2022[10]), with the "usual" expectation that it would be four applications. Alongside obligations on applications, additional support is provided in the form of extra time with counsellors, with meetings now taking place fortnightly for the first three months of the claim and the initial meeting with the counsellor taking place earlier on in the unemployment spell. The policy design has reduced the intended delay between registration and the time until the initial meeting with a counsellor from two weeks to five days. Discussions between counsellor and jobseeker are determined by the agreed employment plan, but focus on strategies to improve job search, reviewing job applications and determining whether additional services, such as training, might help to improve employment prospects. To combat long-term unemployment, every six months jobseekers participate in a more intensive period of activity, lasting for one month. This period includes two job search discussions. The format of these meetings is the same as the fortnightly meetings that occur in the first three months of the claim. In between the periods with fortnightly meetings (the first three months of claim, then one month at month six of claim), jobseekers apply for work on their own initiative. Jobseekers are subject to sanctions if they fail to meet the obligations agreed to with their TE Office or municipality. This increase in contact time with counsellors means that around 1 200 additional job counsellors have been hired to cater for increased demand for services. This represents an increase of 40% of staff, relative to TE Office resources in 2019 (TEM, 2022[11]).

2.4.2. In 2025 employment services will transfer to municipalities

Preparations are under way to transfer TE services to municipalities, with the aim to bring municipalities closer to their customers and align funding incentives so that municipalities benefit more directly from helping individuals into work. At present, KELA is responsible for the payment of the basic unemployment allowance to jobseekers. This means for those individuals receiving that benefit, there is no direct financial implication for municipalities on the receipt of this payment when individuals are helped into work. When this expenditure is paid for by central government, there is little incentive for municipalities to deploy their funding on such policies, instead placing greater reliance on central government to do so. This potentially gives room for a greater disconnect between the local knowledge of firms and individuals that municipalities possess and the implementation of policies designed to help them (when they are delivered centrally). The ongoing reform aims at changing the incentive structure for municipalities by transferring the funding and responsibility for payment of this allowance to municipalities. This will incentivise investment in policies by municipalities which help to connect jobseekers to the labour market, so that expected future benefit expenditure is directly reduced. The objective is to create a service structure that promotes the rapid employment of jobseekers and increases the productivity of employment and business services. TEM estimates that this reform will create an extra 7 000 to 10 000 jobs, as it encourages municipalities to develop employment promotion activities (TEM, 2022[12]).

The risk around this kind of decentralisation, is that it potentially creates room for regional divergence, so that jobseekers in some municipalities are not offered the same quality and standards of employment policies as in others. This can also bring benefits, where municipalities can innovate to improve standards and outcomes (and underpins TEM's own estimates of additional jobs). This kind of inequality may also exist within a municipality, if certain individuals are given preferential services at the expense of others as municipalities seek to make financial gains from helping those that they are more able to influence the outcomes of. These dynamics are not new and the same considerations exist when policy is controlled centrally. However, co-ordination of these risks, management of them and evaluation of their outcomes can be easier to achieve when it is organised centrally. The implementation of some kind of minimum service standards can serve against some of these potential inequalities and the precise design of the accountability framework will be of critical importance, to ensure that this is not the case after services are decentralised.

Before the reform is implemented, there are three areas in which the government wants to gather more information on, to provide evidence for decisions on how to change responsibilities and accountability. The first is in creating an incentive structure for financing that encourages municipalities to provide effective services to help jobseekers find work, by making them responsible for unemployment benefit payments. The second is in ensuring equity in access to services provided by municipalities through appropriate legislative definition of services. The third is to ensure appropriate national service structures are in place to support the localised delivery of services.

As part of the preparations for the reform, a series of pilots will provide evidence on local government employment services provision. From March 2021 to June 2023, a total of 25 areas and 118 municipalities will participate in the pilots. Unemployed jobseekers, including those covered by employment services but not entitled to earnings-related unemployment allowance, are participating in the pilot areas. After the TE service reform is fully rolled out in 2024, these customers will continue being served by municipalities, so that there is a seamless transition to the new operating model for these customers. The objective of the pilots is to provide information on the effectiveness of combining state and local government funding, expertise and customer service. TEM, in conjunction with municipalities and other stakeholders, have prepared national monitoring indicators and a joint evaluation plan. Administrative data will be delivered on individual outcomes to the pilot areas monthly to monitor progress of the pilots. In addition to the monitoring indicators, a series of online customer surveys will be implemented to provide research on customer experiences in the new initiative, with the aim to help authorities and stakeholders develop and reform their services. (TEM, 2022[13]).

2.4.3. Building evidence will be critical to the success of both reforms

In order to evaluate the success of both reforms to the system of ALMPs, it will be critical to build evidence, to present a convincing case that the changes have had their desired impact. This has already been built into the roll-out of the transfer of power to the municipalities with the pilots that are being undertaken, but it should continue when the reform is fully rolled out. Pilots provide a useful gauge of the expected direction of change, however they can suffer from being tightly controlled and monitored during implementation which may limit how well the results can be replicated when the policy is implemented nationally. For example, if a policy is tested in a local office and there are numerous officials involved in the pilot to ensure the policy design is properly implemented, case workers and staff may pay close attention to the rules and procedures of that policy. When the policy is delivered in all offices without this monitoring, staff may not follow the rules of the policy as closely and the outcomes of that policy may be different. Adoption of a staggered roll-out to remaining municipalities, by which municipalities are randomly assigned their roll-out could provide further evidence on effects of implementation. It is not currently planned for in the Finnish reform, where all services are due to be transferred on 1 January 2025. It will be important to set metrics on the administrative data that can establish impacts on jobseekers. In particular, ensuring that equity of service provision is adopted may be analysed by reviewing metrics which analyse service take-up for individuals across different socio-economic characteristics.

2.5. Conclusion

Despite Finland's generally good performance in ensuring its population is engaged with the labour market, there remain challenges to help individuals that are looking for work. The unemployment rate in Finland is higher than the OECD countries, suggesting room to further engage with and help unemployed people look for work. Groups with additional need for help in this respect are younger and older workers and those with lower amounts of education, all of whom suffer higher unemployment than similar individuals in OECD countries. In addition to this, there are a large number of workers who are more marginally attached to the labour market.

To help these jobseekers search for work, Finland has a generous set of ALMPs particularly focused on training and direct job creation. Knowing whether and for whom these policies work for is vital in ensuring that they help individuals to connect to jobs in the labour market. The evaluation of labour market training and self-motivated training, presented later in this report, provides evidence on how well these training programmes help to connect people with jobs.

A number of different institutional stakeholders work together to deliver ALMPs in the labour market and the transfer of powers to municipalities will alter the way this engagement takes place. It will be essential to closely monitor these changes to ensure that service provision to jobseekers remains comprehensive and allows all individuals to participate fully in the ALMPs available. On top of this, building evidence on the newly implemented customer service journey for jobseekers is needed to allow an assessment of how this reform helps individuals to find work.

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Note

[1] See https://te-live.fi/ for further information.

3 Assessment of the system of active labour market policy evaluation in Finland

With the help of a cross-ministry research instrument, the Ministry of Economic Affairs and Employment has been able to meet most of its needs for research on active labour market policies (ALMPs), despite its somewhat modest and fragmented internal resources. Counterfactual impact evaluations have been conducted for most of the key ALMPs over the past years and the operative needs for policy design have been largely covered, although the evidence has been at times dismissed by policy makers referring to its inconclusiveness. A rich set of data are available to be used remotely and securely for ALMP evaluation via Statistics Finland. Nevertheless, the use of data specific to ALMPs suffers due to outdated IT infrastructure supporting ALMP provision and costly access. Moreover, accessing data beyond what is readily available in Statistics Finland can be cumbersome and delay research projects and policy making significantly.

3.1. Introduction

This chapter assesses the system Finland has put in place to evaluate active labour market policies (ALMPs). Knowing what measures and services work, for whom and in what context, is crucial to scale up effective policies as needed and adapt or terminate inefficient policies, especially in the context of limited budgets. Generating evidence and designing policies based on evidence is not only important for specific labour market services (such as counselling services) or measures (training, employment incentives), but also across the tools, processes and approaches used to provide ALMPs. For example, many countries have significantly modernised their IT infrastructure over the past few years to provide ALMPs (OECD, 2022[1]), as well as service delivery models (OECD (2021[2]; 2021[3])) in addition to adjusting the design of specific measures (OECD, 2021[4]), which all need to be evaluated to support continuous improvement. Also changes in the institutional set-ups of ALMP provision need to be evaluated to determine the right path forward (Lauringson and Lüske, 2021[5]). Hence, this chapter refers to ALMP evaluations as evaluations of any dimension of a system to provide ALMPs.

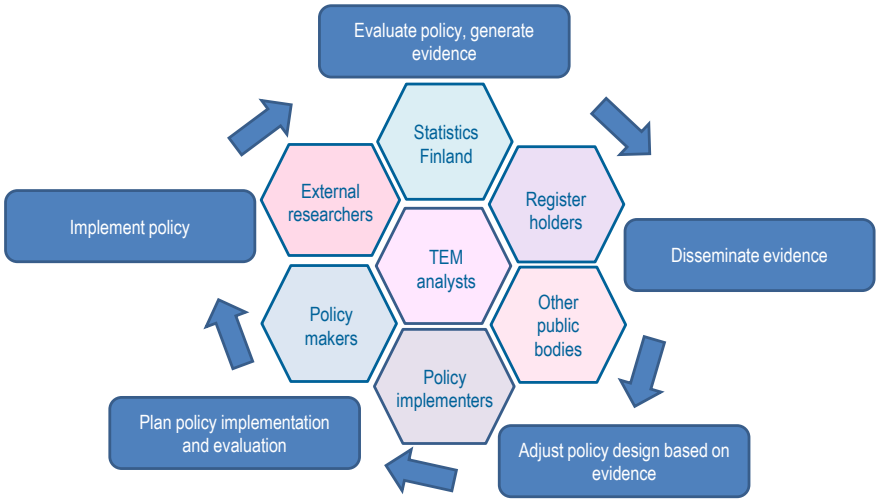
This chapter discusses first the strategy and processes of evidence-based policy making for ALMP provision, focusing particularly on the plans, resources and activities of the Ministry of Economic Affairs and Employment (TEM), which is the ministry responsible for ALMPs. Second, the chapter discusses the implementation of ALMP evaluations, such as designing, procuring and steering research projects. The last section of the chapter discusses the data available to conduct ALMP evaluations, particularly the rich data that are available for research via Statistics Finland.

3.2. Strategy and processes of evidence-based policy making

Evidence-based policy making needs to be systematic and involve the whole cycle of designing policies together with the monitoring and evaluation frameworks, implementing policies, evaluating policies to generate evidence, disseminating evidence, and adjusting policies based on evidence (Figure 3.1). In addition, the evidence generation process itself needs to be assessed and adjusted then accordingly. The cycle of evidence-based policy making can be implemented successfully only if researchers, policy makers policy implementers and other relevant stakeholders work together.

Figure 3.1. Evidence-based policy making is a systematic co-operation process

The cycle of evidence-based policy making



Note: TEM – Ministry of Economic Affairs and Employment.

This section reviews the strategy to evaluate ALMPs in Finland and the resources allocated to implement the strategy, as well as the practices to disseminate evidence on ALMPs and how this evidence is used for policy making. The aspects of implementing ALMP evaluation are discussed in the following two sections.

3.2.1. Fragmentation in research activities and a missing longer-term strategy can lead to gaps in evidence

TEM is responsible for ALMP design and the organisation of ALMP implementation in Finland. To design ALMPs and their delivery in an evidence-based manner, the analysis and research activities of TEM need to collect and generate sufficient and relevant evidence.

TEM uses a decentralised model for its analysis and research activities, which can lead to people with more diverse skills and expertise conducting these tasks but might also cause fragmentation in knowledge generation. Tasks related to policy analysis are scattered across policy areas and teams. Furthermore, analysis is mostly a part of tasks for a staff member (often only 10-20% of working time), rather than a full-time job. This enables people who are experts in specific policies, also to engage in the related analysis. Nonetheless, it is difficult to ensure in such set-up systematic knowledge generation, avoid duplication in analysis and ensure that data and knowledge sharing are streamlined for maximum efficiency. To lower the risk of fragmentation, TEM has established a co-ordination group for policy analysis, involving staff from its different units.

Due to the decentralised model for analysis and the low number of staff dedicated to analysis and research, TEM has decided to no longer prepare and implement a long-term research strategy. Currently, TEM's annual research plan is the strategic document on which evaluation and research activities are based, above all concerning research to be contracted out. Each TEM division makes its proposal for the annual research plan. The Permanent Secretary of TEM decides on the budget allocation across the divisions, optionally after the management team of TEM has discussed the research plan (on high level rather than individual projects). Hence, both the research side and the policy makers are involved in developing the annual research plan. The decentralised model for analysis further supports developing an annual research plan proposing projects that would be analytically feasible and politically relevant.

TEM should consider re-establishing its longer-term strategic view (i.e. several years ahead) on research and evaluation activities to be able to manage and develop its analytical capacity, and above all, ensure continues improvement in evidence-based policy making. In addition to specific research projects in the annual plan, the longer-term strategy should outline the objectives and priorities of research activities longer term, and the milestones to reach the objectives, considering both internal capacity and contracting out. At the moment, a substantial part of policy analysis takes place internally and ad-hoc, not planned even in the annual plan for analysis. Such analytical tasks are undertaken when new amendments to laws are drawn or quick inputs for policy making are needed. On the one hand, this ensures flexibility for the analytical capacity to meet the needs of policy making, contributing to evidence-based policy design. On the other hand, a lack of a more strategic view on evidence generation can be hindering the potential for continuous improvement, might not ensure these activities receive the attention and priority they need, and leave gaps in evidence to inform policy making.

Nevertheless, TEM has used some approaches to research systematically over the years, regardless of not being fixed in its strategic documents. Above all, one underlying principle for labour market research has been to contract major policy evaluations out to external researchers. Internal capacity for analysis is reserved mostly for operational needs, such as quick insights on labour market situation or simpler ex-ante policy evaluations. It is assumed that externally conducted research ensures more objectivity and credibility among the stakeholders of the ALMP system, the policy makers and the society more generally. Following this principle, all counterfactual impact evaluations of ALMPs have been in the past years conducted by external researchers.

Encouraging external research on ALMPs is indeed important to have a large evidence base for policy making, taking an advantage of a larger set of skills and knowledge available on the market and bringing more transparency, quality and credibility in evidence-based policy making. Nevertheless, good understanding of ALMP evaluation is needed internally in TEM to ensure good inputs to design the procurement of research, be able to communicate with the external researchers as equals, control research quality and feed research results into policy design. The best way to acquire and maintain such knowledge and skills for TEM staff would be to also conduct such evaluation activities in some scale in-house. For example, the Employment and Social Development Canada (ESDC)[1] fulfilling a somewhat similar role as TEM in Finland, has developed a high capacity to conduct systematic ALMP evaluations in-house (OECD, 2022[6]). However, as no data are shared by the ESDC with external researchers and no research is out-sourced, it can raise issues of the credibility of evidence (see Box 3.1).

Box 3.1. The system to conduct ALMP impact evaluations in Canada

The Canadian Ministry of Employment, ESDC, internally produces high-quality counterfactual impact evaluation of its ALMPs. ESDC has invested over the years to build an internal evaluation directorate to deliver counterfactual impact evaluation of its ALMPs. It conducts evaluations using its linked administrative data and quasi-experimental techniques such as propensity score matching and difference-in-difference analysis. Removing the use of survey-based data and external contractors for delivery of the analysis facilitated much reduced analytical production times and cost savings of around CAD 1 million per annum.

Canada has an institutional set-up in the delivery of its ALMPs that offers potential insights for Finland when the latter introduces its 2024 reform to increase responsibility for municipalities for delivery of ALMPs. Canada discharges the responsibility for delivery of the majority of its ALMPs to its 13 provinces and territories. Rolling cycles of ALMP evaluations are primarily managed through a Joint Evaluation Committee, comprising federal and provincial officials from the 12 participating regions. This sets the objectives for each cycle of evaluation and monitors progress of the analysis. The committee ensures that decisions are made collectively and contributes to a common vision for progress. The analysis is then conducted on behalf of the participating regions via the central evaluation function in ESDC. The result of this co-ordinated approach is that ESDC has been able to progressively build high-quality evidence on the effectiveness of its ALMPs across Canada, both at national and regional level, and publish all of its evaluation work on the Government of Canada website.

There are data management features within the process of evaluation that offer insights for Finland. The transfer of ALMP data from provinces and territories to the federal government allows a streamlined and efficient centralised evaluation, which minimises any additional work by individual provinces and territories. In addition, detailed cost-benefit analyses allow comparison of ALMPs with very different cost and benefit structures. Despite the lack of individual-level participant costs, estimates are formed using aggregate costs and participant numbers. Taxes, benefits and government financing implications are incorporated into this analysis, and soon also health data.

One of the drawbacks of the current approach is that not all the necessary data for ALMP evaluation are available to external researchers. This means that analysis cannot be externally corroborated, and it is not currently possible to benefit from potential innovations and additional evidence generation that these researchers could provide.

Source: OECD (2022[6]), *Assessing Canada's System of Impact Evaluation of Active Labour Market Policies*, https://doi.org/10.1787/27dfbd5f-en; Government of Canada (2022[7]), *Evaluation reports*, https://www.canada.ca/en/employment-social-development/corporate/reports/evaluations.html.

3.2.2. Resources for knowledge generation on ALMPs are not sufficient in the Ministry of Economic Affairs and Employment

In Finland, ALMP impact evaluations are not only contracted out by TEM, but also via a cross-ministerial initiative, as well as occasionally conducted by the Ministry of Finance (the latter is not responsible for conducting ALMP evaluations per se, but needs to evaluate policy impacts on public finance, co-operating with other ministries as necessary). The differences in the capacities of these organisations to conduct research raises however a question, whether TEM can be indeed the driver of policy making in the field of ALMPs. This section discusses the capacity and resources to conduct research on ALMPs in each of the three organisations separately.

TEM lacks the necessary internal capacity to conduct ALMP evaluations

TEM currently employs only one full-time researcher (the Research Director of Employment and Well-Functioning Markets Department) focusing on ALMPs among other topics. Furthermore, a shift in the concepts and terminology of the Finnish public sector has taken place since the 1990s, which aims at more administrative job titles and tasks in the ministries. Hence, rather than researchers, people in charge of analytical activities have the job titles of senior specialists and Ministerial advisers.[2] The Research Director of Employment and Well-Functioning Markets Department is the key staff member to design research projects for contracting out to external researchers and conduct some analysis internally in TEM.

Although some ministries in Finland employ economists who have the capacity to conduct credible policy evaluations, TEM employs only few economists. Firstly, this is the result of the TEM's hiring policy that aims to have people who could fit in its decentralised model for analysis and simultaneously contribute to the perceived core tasks of the ministry, i.e. policy design and the preparation of changes in legislation. Thus, most of the workforce in TEM has a rather homogenous qualification and skill set, above all related to legal affairs. Secondly, the lack of economists is the result of a tight budget to cover internal needs for analysis, and wage levels that are not competitive on the market. In these conditions in the past years, it has been difficult for TEM to hire and maintain staff with sufficient knowledge, skills and experience to conduct analysis using more advanced econometric methods, such as counterfactual impact evaluations of ALMPs. As TEM has only few researchers and economists, there is also only a limited number of staff that is able to design research projects for contracting out and steer these projects in partnership with external researchers. A limited number of staff for analytical tasks means that some of the needs for evidence are not met, as the staff are able to address only the more urgent needs for policy analysis that do not require intensive data analytics. Rather than conducting data analysis, the analysists might propose proxies for policy impacts based on previous related Finnish and international research, which is often the only feasible solution considering the tight resources. TEM also has a shortage of related skills, such as data scientists to support the preparation of data for data analytics (e.g. defining data needs for the IT developers that TEM works with, making the data available for analysts across TEM).

To overcome the challenges of low resources for internal analysis, the analysts in TEM have taken steps to increase the analytical capacity internally. In general, the staff do not have time and resources to individually build up their capacity for more advanced analysis and be current with the latest tools and methods of policy evaluation. Thus, the staff more involved and advanced in policy analysis, occasionally organise internal training for their colleagues, particularly before a joint analysis is about to start. Internal training on interpreting research results and research terminology is conducted sometimes for staff that need to use the evidence in policy design, while not being data analysts themselves. External researchers are invited sometimes to participate and present in TEM seminars. Nonetheless, to fully overcome the capacity challenges, TEM needs to additionally allocate more resources for analysis and research, and preferably hire some economists who could support these functions full time.

The budget of TEM for external research is flexible, but insufficient

The annual research plan is the main strategic document in TEM that defines the research to be contracted out and the allocated budget across policy fields. After the allocations have been assigned by the Permanent Secretary of TEM, each division can decide which of their projects and how to implement.

The total budget of TEM to contract out research projects has been around EUR 1.5 million over the past few years (for comparison, the operating expenditures of TEM in 2022 are EUR 38.2 million (Ministry of Economic Affairs and Employment, 2022[8])) and the topic of labour market policy is just one of the many topics covered. Furthermore, a large share of the research budget goes on annual reviews, such as annual labour market reviews and barometers. Other projects financed from the research budget are mostly small-scale projects aiming to feed into the preparation of specific changes in legislation. This leaves only a low budget to outsource actual research, and even less to outsource ALMP evaluations.

The research budget has some flexibility, and divisions can make changes within their budgets in case policy priorities change. The co-ordination group of research activities that involves representatives from the different divisions of TEM oversees the management of the research budget. In case needs emerge for major research projects, some re-allocation of research budget between the divisions is possible.

The cross-ministry joint research instrument is critical for strategic needs for knowledge, but does not help with systematic ALMP evaluations

Since 2014, Finland implements a cross-ministry research instrument – the joint analysis, assessment and research activities (VN TEAS) – co-ordinated by the government (the Prime Minister's Office) (Prime Minister's Office, n.d.[9]). This instrument aims to cover strategic research needs that are relevant across policy fields, ensuring strong horizontal knowledge base to support decision-making and the implementation of the Government's Programme. The government working group for the co-ordination of research, foresight and assessment activities (TEA Working Group) consisting of representatives across the ministries in Finland, makes a proposal for the VN TEAS annual plan to the Prime Minister's Office (Prime Minister's Office, n.d.[10]).

The VN TEAS 2022 plan touches upon labour market issues within its nine main research topics, particularly within "Finland built on trust and labour market equality", "Fair, equal and inclusive Finland" and "Finland that promotes competence, education, culture and innovation" (Prime Minister's Office, 2021[11]). Moreover, the 2022 plan foresees meeting additional demands for research needs based ("Other information needs" as a tenth topic left to be defined over the year).

The budget to implement the 2022 plan of the VN TEAS is EUR 9 million (Prime Minister's Office, 2021[11]) and the volume of the budget has been similar during the past years. This allows to conduct substantial research projects, reaching occasionally even close to half a million euros, which would be difficult to achieve for a single ministry. It can be particularly helpful for smaller ministries that do not have a dedicated research budget. While the short projects funded via the VN TEAS last for a few months, the projects can be often longer, even up to three years. Due to the budgets and timelines, the research funded by the VN TEAS enable to conduct projects needing intensive data analytics, including policy evaluations requiring advanced econometric methods.

The research organisations to conduct the projects of the VN TEAS are selected through a public procurement process (open call). The procurement process aims at transparency and quality using the following selection criteria for tenders: relevance, usability, project quality, expertise of the project implementers, adequacy of resources, communication and information management (Prime Minister's Office, 2021[11]). Often several research organisations work together on a project (in collaboration with the TEA Working Group and the ministries responsible for the specific topic), making it possible to involve a more varied expertise and increase research quality. The strategic importance of the projects, the possibilities to use advanced data analysis and the funding scheme make the projects appealing for the

research community, enabling the VN TEAS to select the best research organisations in Finland to conduct the analyses. To further ensure the research quality, the VN TEAS has implemented a peer review process (research results are reviewed by another researcher) in some of its latest projects.

In practice, the research topics and projects to be included in the annual plan of the VN TEAS follow mostly a bottom-up approach. The research needs are generally identified by ministries individually and proposed to the TEA Working Group. In some cases, the research ideas have been developed in open co-operation of several ministries. All proposals are assessed by the TEA Working Group and can be included in the annual plan only if several ministries consider the research need relevant. As the TEA Working Group comprises both researchers (research directors) and high-level policy designers, the projects included in the annual plan have a high potential to feed well into the cycle of evidence-based policy making.

The project assessment process by the TEA Working Group ensures that only strategic research needs of cross-ministry relevance get funded via the VN TEAS. There is no certainty of acceptance or the budget allocation in the proposal stage as the TEA Working Group gets many more proposals for research needs than the budget enables to cover. Hence, TEM aims to make its proposals usually beyond its own specific needs, tying in related research questions from other policy fields and get other ministries interested in these projects. TEM has been successful in getting some of its research needs covered within the VN TEAS on several occasions, including regarding ALMP impact evaluations, thus not needing to cover this part of evidence generation within TEM's annual research plan and internal research budget.

Nevertheless, the VN TEAS might benefit the research needs of some ministries better than others, due to both political priorities, as well as specificities of some policy fields. In any case, the VN TEAS cannot be the only or even the main instrument to fund systematic ALMP evaluations due to its nature. Yet, it can be instrumental in generating evidence in case of more major reforms of ALMPs that could potentially affect other policy areas, such as education, social and health policy.

The Ministry of Finance helps to overcome some gaps in evidence, but does not necessarily meet the strategic needs of other ministries

The Ministry of Finance has a higher capacity to conduct policy evaluations than many other ministries in Finland. Contrary to TEM, the Ministry of Finance employs a substantial number of economists, some of whom have the skills to conduct counterfactual impact evaluations of policies, such as using matching methods or regression discontinuity design. Developing such a team has taken place over several years, as similarly to TEM, it has been difficult to hire experienced researchers at the prevailing public sector wages.

As the Ministry of Finance has higher analytical capacity, it has been recovering some of the other ministries' research needs. Above all, the Ministry of Finance conducts policy evaluations in the fields that it finds politically relevant, that affect the state budget and where evidence generated by the responsible ministry or external researchers is not considered to be sufficient. In this context, the Ministry of Finance has recently conducted an impact evaluation of self-motivated training provided to jobseekers (the results have been shared with other ministries but have not made publicly available).

While research conducted by the Ministry of Finance can overcome some gaps in evidence generation in the framework of limited research budget in TEM, this mechanism does not ensure that evidence generation on ALMPs meets the strategic needs of TEM. As TEM is the policy designer in the field of ALMPs, it needs to assign sufficient resources for related knowledge generation to be able to drive labour policy and do so based on evidence. Research on ALMPs initiated by other organisations needs to be taken into account in policy making, but this channel cannot be assumed to cover TEM's strategic needs for research.

3.2.3. Despite systematic dissemination, evidence does not always feed into policy design

This section discusses the dissemination and communication of evidence, as well as the challenges for evidence to reach policy makers.

Research results are published systematically

In addition to publishing the main research reports on the TEM website, the research and analysis results on labour policy issues are systematically published in the dedicated publication series of TEM – Finnish Labour Review (*Työpoliittinen aikakauskirja*).[3] The periodical is published four times a year, comprising articles written by TEM internal analysts and economists, as well as external researchers (including research that has not been funded by TEM). The articles discuss the issues related to ALMP evaluation and changes in the ALMP system in Finland from the *ex-ante* and *ex-post* perspective, among other topics.

In addition, TEM has a publication series for analyses across TEM policy fields, TEM analyses (*TEM-analyyseja*).[4] This series publishes the results of these analyses and research projects that are conducted internally by TEM. Many of the analyses in this series are regular reviews of specific topics, such as labour market forecasts (for example Alatalo et al. (2022[12])) and overviews on job creation (for example Räisänen and Ylikännö (2021[13])). One of the annual reviews provides an overview of employment rates three and six months after participation in different key ALMPs (Tuomaala, 2021[14]). This review labels some of the ALMPs, somewhat misleadingly to be better than others, by presenting only gross effects and not (net) counterfactual effects. It should be communicated more clearly in this report, including in its abstract and executive summary, that participants in business start-up subsidy and work-related rehabilitation are likely to have very different employment prospects, which does not directly allow to compare the gross effects on employment (or even net effects unless the groups of participants in different measures are balanced between them).

Both the Finnish Labour Review and TEM analyses series publish extensive statistical overviews of key labour market statistics. Labour market statistics, including the statistics on ALMPs are also published in the Annual Statistical Bulletins of TEM (*Tilastotiedote-vuosijulkaisut*).[5] All these statistics are published in PDF format. The monthly Employment Bulletin[6] provides somewhat higher user-friendliness and interactivity and covers the key statistics of ALMPs. In addition, these statistics are available via the database of Statistics Finland,[7] which allows the data user to customise and download the data of interest.

The research conducted by the VN TEAS has its dedicated publication series managed by the Prime Minister's Office directly – Publication series of the Government's analysis and research activities (*Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja*) – accompanied by shorter Policy Briefs.[8] In this series, several counterfactual impact evaluations of ALMPs have been published over the years. These include the evaluation of jobseeker counselling (Valtakari et al., 2019[15]), wage subsidies (Asplund et al., 2018[16]), training (Alasalmi et al., 2022[17]) and two evaluations across several key ALMPs (training, wage subsidies, work-related rehabilitation by Aho et al. (2018[18]); and wage subsidies, training and business start-up subsidies by Alasalmi et al. (2019[19])).

Communication around publication is less systematic

The TEM communication department supports TEM analysts in disseminating their newest reports to media via press conferences and press releases. The press conferences are occasionally organised to disseminate the key results that could be of wider public interest.

There are no systematic dissemination channels between analysts and policy makers in TEM. The initiative to learn about the new research results comes occasionally from the minister and key policy designers in TEM, in which case they are briefed about the research outcomes in a meeting or seminar, which can be

supported with a short policy brief. A difference in the qualification background between economists and lawyers drafting legal amendments in TEM has been one of the hurdles in communicating the results. However, some dissemination between analysts and policy designers takes place indirectly due to the decentralised model for analysis, as the analysis tasks are often only a small fraction of tasks for a staff member and the majority of tasks are more related to policy design.

To support evidence-based policy design and implementation, analysts in TEM need to take initiative to disseminate the analysis results more systematically to policy makers, policy implementers and the broader public. The content and channel of communication need to be defined based on the specific audience. For example, the communication to policy designers might need to focus less on the evaluation methods, but more on policy design elements needed to be changed. Communication to policy implementers might need to take a form of guidelines for employment counsellors.

Policy making concerning ALMPs is not thoroughly evidence-based

The systems to develop the annual research plan in TEM and the annual plan of the VN TEAS ensure that the undertaken research projects have high political relevance and that their results are needed for policy making (see Sections 3.2.1 and 0). Thus, it is common that projects to generate evidence are initiated before major changes in ALMP design or in the ALMP system more generally. Furthermore, piloting and experiments in the field of ALMPs are relatively more common in Finland than in many other OECD countries, enabling to collect credible evidence.

However, the evidence gained via the research projects of TEM and the VN TEAS are not systematically taken into consideration in policy design. The main reason behind this is the political ambition or need to make changes faster than the evidence can be generated, partly affected by election cycles. For example, before the major institutional reform currently taking place in the ALMP system in Finland was approved in September 2021 (see Chapter 2), a pilot to test the new set-up was started. Nevertheless, the decision to go on with the reform was taken before the evaluation results of the pilot became available (the pilot only started in March 2021 and was planned to end in June 2023). The decision was based on *ex-ante* evaluations of the reform (drafted by the Ministry of Finance in co-operation with TEM) and evidence from other countries (above all Denmark), but not the pilot that Finland had carefully planned and designed, and even allocated additional funding for in the midst of the COVID-19 pandemic challenges (Ministry of Economic Affairs and Employment, 2020[20]). Furthermore, the decision was potentially affected by the ambition of the more capable municipalities to take on additional responsibilities.

In addition, there can be other factors that contribute to a somewhat weak link between evidence and policy making, such as:

- Insufficient dissemination of the research results of TEM among policy makers as discussed in the previous subsection. The research results are communicated to the policy makers in case of their initiative, but not systematically vice versa. The TEA Working Group aims to disseminate the research results of the VN TEAS and facilitate the use of this evidence in policy design among its key tasks. Nonetheless, there is no mechanism to ensure that evidence generated in the VN TEAS is taken into account in policy design.
- The evidence is often dismissed by policy designers referring to its inconclusiveness due to the methodology, such as quasi-experimental design of ALMP impact evaluations.
- Some of the evidence has been dismissed due to unexpected research results, not coinciding with the expectations and assumptions of the policy makers.
- Gaps in evidence generation due to a missing longer-term strategic view (3.2.1) and limited resources for systematic ALMP evaluation (0).

As a result, major reforms can be initiated without sufficient *ex-ante* knowledge about the upcoming changes or *ex-post* evidence on the previous reforms.

To continuously improve the quality of draft laws and particularly the impact assessments in government proposals, the Finnish Council of Regulatory Impact Analysis (FCRIA) was established in 2016 (Prime Minister's Office, n.d.[21]). The FCRIA issues around 30 to 50 statements each year concerning draft laws and draft amendments. Although located in the Prime Minister's Office, the FCRIA is an independent body and chooses which legal proposals to assess. Above all, this council assesses whether the impact evaluations of the proposed legal changes (generally *ex-ante* evaluations) are appropriate and makes proposals to improve them. The statements issued by the FCRIA are not binding for the ministries, but by making these publicly available, these potentially do encourage the ministries to consider improving the evaluations in the draft laws. Nonetheless, the FCRIA does not conduct impact evaluations itself or assesses whether indeed (all) relevant evidence has been taken into account in the legal proposal.

To further improve the link between evidence and policy design, Finland could consider extending the tasks of the FCRIA to monitor that all relevant evidence available has been indeed used as inputs in the draft legal proposals. As a key priority, the FCRIA could check whether above all the research results of the VN TEAS have been considered, as these are ought to be the key strategic research projects. Furthermore, the FCRIA and the VN TEAS could co-operate in exchanging information on on-going research projects and draft legislation being assessed to avoid a situation where a major legal change is taking place while the evidence generation is still in progress.

3.3. Implementation of research projects

This section discusses the procurement process in TEM to outsource research projects, the practices to design and steer research projects, and the types of ALMP evaluation implemented via these processes.

3.3.1. Procurement process to outsource research is well-established and transparent

The key parts of the calls for tenders for research issued by TEM are the research questions, the expected cost and the timeline. Sometimes other research components are established as well, such as which data are expected to use. The procurement process to outsource research in TEM follows the national procurement legislation. The exact process depends on the foreseen cost of the research project, as smaller projects costing below EUR 60 000 can follow somewhat simpler process of a small-scale procurement and projects exceeding the thresholds set by the EU need to follow the EU procurement process. Generally, the TEM research projects fall under the regular or small-scale procurement processes.

TEM focuses on quality components in its assessment criteria in procurement, selecting the most economically advantageous tender. The price component weighs usually about 10-20%, while the key component is the research plan. The assessment criteria also often include components like competency of the research team and the communication and dissemination plan.

The calls for proposals receive usually in between two to five applicants and joint applications. Regarding research on ALMPs the applications usually involve universities (e.g. Tampere University), research institutes (e.g. ETLA Economic Research, VATT Institute for Economic Research, the Labour Institute for Economic Research LABORE, PTT Economic Research), consulting firms in case of more qualitative research, as well as lately some research and consulting organisations from other countries (such as Copenhagen Economics).

The assessments of tenders are considered to be very transparent by the applicants (research organisations). Thus, there have been almost no cases of contesting the assessment results over the years. The assessment process involves several people from TEM who need to assess each tender by the evaluation criteria and provide a written assessment statement. The official in charge of the assessment collects and compiles the different written assessments.

3.3.2. Designing research projects is an internal process in TEM

The process to develop the description of the research project for contracting out takes place internally in TEM. First, the divisions define their needs and research questions. Then, the final formulation and description of expected methodology are finalised, led by the TEM official assigned to be in charge of the research project. External researchers are not involved in the design of the project descriptions for procurement as the process needs to be transparent and fair for any potential bidder. Hence, TEM rather organises more general research seminars to exchange ideas with external researchers on ALMP analysis and evaluation, rather than looks for explicit ideas and proposals from them for specific projects.

However, also research and analysis projects to be conducted internally are designed and conducted only internally. In these cases, the design and methodology could be discussed more explicitly and openly with external researchers, for example within the TEM research seminars. Furthermore, discussions with external researchers could be particularly important when designing major trials and pilots even if the evaluation would be later contracted out. It is critical to design trials and pilots correctly to generate credible evidence. The external researchers might be interested in contributing to these discussions without remuneration (their incentive could be to simply have a say in politically relevant topics and have a better awareness of policy developments) and the information on the design could be shared in the later procurement documents to ensure equal opportunities for the external researchers.

Developing the research projects within the VN TEAS for procurement involves generally more stakeholders. Above all, staff from different ministries are involved to design projects that satisfy the cross-ministry needs for evidence (although generally one of the ministries initiates a project with its research questions, and other ministries are asked to join the project). As project design involves researchers from different ministries and policy fields, it helps to compensate somewhat for not involving external researchers in designing research projects.

3.3.3. Outsourced research projects sometimes underestimate the timeline to generate credible evidence

According to external researchers, the greatest issue with the design of research projects in the field of ALMPs, as well as with research projects in Finland more generally, is the foreseen project timeline. As policy makers expect the evidence quickly, the timeline in the procurement documents sometimes underestimates the time it takes to generate credible evidence. The analysts in TEM need to create more awareness among the policy makers on the feasible timelines of research projects, such that the procurement documents would not foresee *ex-ant*e evaluations of changes in legislation where the agreements among the policy makers on policy design have not been reached yet; or *ex-post* impact evaluations of policies that have been in force only recently and where the impact could not be identified yet.

A particularly critical issue with the timelines for the research projects concerns the timeline expected to access the relevant data. While rich data are available via Statistics Finland, getting access to these can take a while (see Section 3.4). The timeline is even longer in case additional data need to be linked with the data in Statistics Finland. Furthermore, the datasets in Statistics Finland regarding ALMPs and the labour market have a considerable time lag, which makes them generally unfit to be used for evaluating recent policy changes. These circumstances mean that either the research projects cannot be evaluated within the foreseen timeline or there are only a few research organisations that are better placed to deliver the evaluation faster as they have a contract on the remote use of data with Statistics Finland on permanent terms (e.g. the University of Helsinki; although the scope of data access needs to be identified again for each specific project). This in turn puts the potential bidders to research tenders in unequal position.

As a solution to the problems with foreseen timelines to conduct research, TEM extends the project timelines when the researchers make it evident that the proposed timelines are not feasible. In addition to

improving the planning of research projects and raising awareness on the feasible timelines among policy makers, Statistics Finland and administrative registers need to continue their efforts to shorten time lags in data availability (see Section 3.4).

3.3.4. Good project steering practices in TEM are the main tools to ensure sound methodology and quality in evidence

As TEM aims to select the most economically advantageous tender when outsourcing research, the key component to be assessed is the proposed research plan, and particularly the proposed methodology to answer the research questions. If necessary, additional details on the methodology are requested from the tenderers to ensure that sufficient information would be available to select the most appropriate approach. A contract is signed with the successful tenderer, which makes the accepted research plan and research methodology binding for the project.

A dedicated steering group is set up for each contracted research project in TEM, involving relevant experts from policy design as well as analysis. The steering group is guiding and monitoring the research projects, ensuring that the external researchers have all of the relevant information available and that the generated evidence is sound for policy making. The steering group also monitors that the project is following the accepted research plan and methodology, although minor changes can be enabled if necessary (e.g. some data cannot be accessed). The TEA Working Group is co-ordinating and monitoring the implementation of the research projects of the VN TEAS.

In a few more recent research projects, the VN TEAS has started to explore peer reviews as an additional tool for quality control. In such a case, external researchers others than those who conducted the research project, review the methodology used and provide their opinion on the credibility of the research results. On the one hand, this approach can increase policy designers' confidence to use the generated evidence in policy making. On the other hand, it can create additional concerns, such as how to select the peer reviewers (whether researchers who also made a tender to conduct the research could be later peer reviewers or whether also peer reviewing needs to be procured) and whether peer reviewing should be remunerated increasing slightly the project costs.

TEM aims to ensure research quality via sound procurement process and project management. Furthermore, the research results are published by TEM and researchers are encouraged to publish the results in academic journals. The transparency of results also acts as a tool for quality control as these are available for the research community to publicly discuss and criticise. In addition, the academic journals generally also apply peer reviewing before publishing the papers. Hence, the academic community is safeguarding the level of research.

The ESDC in Canada uses external peer reviewers for quality assurance. The ESDC consults independent academic experts on methodology while conducting research, as well as asks them to review the research reports (OECD, 2022[6]). However, contrary to TEM, the ESDC conducts all ALMP evaluations exclusively in-house, so peer reviewing concerns the research done by the analysts in the ESDC, not by other external researchers. In addition, the reports of ESDC are written in English/French, which enables them to engage peer reviewers from a wide pool of academic researchers internationally. In the case of TEM, it generally might not make sense to translate the research reports fully into English as the main aim is to support policy making in Finland and translation would further increase project costs.

TEM could consider peer review process for the research projects it conducts internally. In addition to discussing methodologies and results generally, TEM could invite external researchers to review the research reports written by TEM analysts in more detail.[9] Moreover, if this approach could be used, TEM could consider conducing ALMP impact evaluations internally as these are at the moment fully contracted out due to objectivity concerns. In case peer reviewing by external researchers would be systematically applied, the research objectivity criteria could be still met if some of the research would be conducted

internally. Internal analysis with external peer reviewing could be, for example, used when the evidence needs to be generated quickly, as TEM has then better control over data access, as well as the timeline more generally. This approach could also help TEM to have a better control over the research cost, enabling potentially remunerate peer reviewing within the research budget. Nonetheless, conducting ALMP evaluations internally might need building the capacity first for this kind of research, above all by hiring more staff with appropriate skills and knowledge (see Section 0).

3.3.5. Impact evaluations of ALMPs will gain more credibility by applying the experimental design more often and adding cost-benefit analyses

A considerable volume of evidence on ALMPs has been generated via the different funding mechanisms over the past years. Some evidence on the effectiveness of most of the key ALMPs (jobseeker counselling, training, wage subsidies, work-related rehabilitation, business start-up subsidies) and a meta-analysis of Finnish and international labour market policy evaluations are publicly available via the research reports of the VN TEAS (Aho et al., 2018[18]; Alasalmi et al., 2019[19]; Valtakari et al., 2019[15]; Asplund et al., 2018[16]; Alasalmi et al., 2022[17]; Alasalmi et al., 2020[22]). A few additional counterfactual impact evaluations of ALMPs (above all training) have been conducted by the Ministry of Finance, although they are not publicly available. The research and analysis conducted and outsourced by TEM provides inputs for policy making via ex-ante evaluations and descriptive analysis of ALMP measures and services, as well as reforms and digital tools in the Finnish ALMP system.

The impact evaluations of ALMPs use counterfactual evaluation methodology,[10] combining quasi-experimental[11] and experimental designs. The impact evaluations of ALMP measures and services conducted so far are using mostly quasi-experimental evaluation methodology, almost exclusively propensity score matching. Experimental design has been used to trial issues like the institutional and organisational set-up of ALMP provision and job-search training.

As more evidence from *ex-post* evaluations has become available, the quality of *ex-ante* evaluations has increased. *Ex-ante* evaluations use increasingly the previous impact evaluations as inputs, aiming to predict the changes in policy effectiveness due to changes in policy design (legal changes). In addition to the results of previous impact evaluations in Finland, evidence from other countries is used, particularly if evidence from Finland is not available.

Although Finland is already using experimental design for ALMP impact evaluation more than many other OECD countries, applying pilots and trials could be used even more to generate credible evidence. At the moment, evidence generated using quasi-experimental design is often criticised or even dismissed by policy makers as being inconclusive. Testing and evaluating new ALMP designs, (digital) tools for employment services and business models for ALMP provision could be piloted and trialled more systematically before nation-wide rollout to fine-tune the design and be confident in the effectiveness, as well as have more credible inputs for future *ex-ante* evaluations. Particularly the randomised controlled trial design (RCT)[12] could be the evaluation design to be aimed at, as it is considered to be the gold standard of impact evaluation. The results of a well-designed and correctly implemented RCT are more credible, because unlike quasi-experimental design, these results are not exposed to selection bias (OECD, 2020[23]).[13]

While impact evaluations have been conducted about most of the key ALMPs in Finland, there is scope for conducting systematically cost-benefit analyses to demonstrate the value added of different ALMPs more explicitly. Cost-benefit analysis builds on counterfactual impact evaluation, examining the impact of ALMPs in relation to the costs of implementing the ALMP and, if possible, the opportunity costs for participants (e.g. foregone earnings) as well as indirect costs on non-participants (e.g. negative externalities). Cost-benefit analysis demonstrates whether the funding invested in ALMPs could generate benefits for the society exceeding the investments. For example, the ESDC in Canada (OECD, 2022[6]) and the Department for Work and Pensions in the United Kingdom (2014[24]) complement their ALMP

impact evaluations systematically with cost-benefit analyses. In Finland, there has been one research project conducted under the VN TEAS (Alasalmi et al., 2019[19]) that in addition to evaluating the impact of different ALMPs, also aims to estimate the direct and indirect costs of unemployment, although not conducting a full cost-benefit analysis to assess the value added of ALMP provision. Another more recent research project outsourced by the Audit Committee of the parliament conducts a cost-benefit analysis of a range of key ALMPs using aggregate expenditures on ALMPs to derive estimations (Alasalmi et al., 2022[25]). Conducting cost-benefit analyses is hindered in Finland due to the difficulties to access comprehensive cost data on services, measures and benefits for research purposes as these data are scattered across many different registers and so far not made available on individual level via Statistics Finland. The register owners, researchers and Statistics Finland need to define the set of cost data relevant for cost-benefit analyses of ALMPs and invest in making these available together with other datasets on ALMPs and jobseekers for researchers (see the next section for further discussions on data availability for research purposes).

3.4. Data used for ALMP evaluation

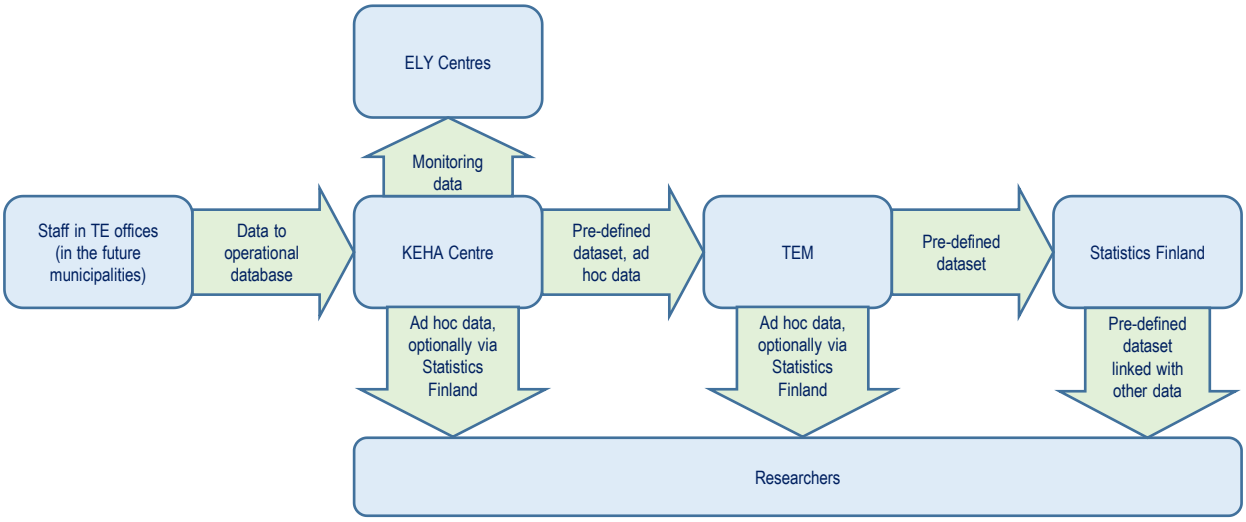
This section discusses the quality and accessibility of administrative data relevant for conducting ALMP impact evaluations. Administrative data are generally preferred data source to conduct impact evaluations as these can have high coverage of population, be continuously collected over time, suffer less from measurement errors and misreporting and be used cost-effectively (OECD, 2020[26]). The impact evaluations of ALMPs conducted in Finland so far rely on the administrative data sources. Nevertheless, it might be necessary to link administrative data with survey data in some evaluations to address any potential selection bias (for example due to differences in motivation between ALMP participants and other jobseekers) or measure outcomes for which administrative data are not easily available (such as mental health or well-being).

The main organisation facilitating access to administrative data for research purposes in Finland is Statistics Finland.[14] However, a wider range of stakeholders play a role in generating administrative data and sharing these with Statistics Finland. The data flows concerning administrative data on ALMPs, jobseekers and job mediation are depicted in Figure 3.2. Staff in TE Offices (Employment and Economic Development Offices) implement ALMPs and insert the relevant data within this process using the IT infrastructure provided for them by the KEHA Centre (the Development and Administrative Centre for ELY Centres and TE Offices). The IT infrastructure provided by the KEHA Centre is also relevant for ELY centres (Centres for Economic Development, Transport and the Environment) in steering TE Offices. KEHA Centre is also responsible for making queries in the ALMP database to share data for research purposes with TEM, with Statistics Finland via TEM, as well as with researchers directly.

The next subsections discuss the role of these different stakeholders in data exchange in detail while the role of these stakeholders in the ALMP provision more generally is discussed in Chapter 2. The specific issues regarding the suitability of the data available via Statistics Finland to conduct ALMP impact evaluations is discussed in Chapter 4, as well as in detail in the technical report accompanying the current report (OECD, 2023[27]).

Figure 3.2. Administrative data on ALMPs for research purposes are shared mainly by Statistics Finland

Main data flows of administrative ALMP data



Note: TE Offices – Employment and Economic Development Offices. ELY Centres – Centres for Economic Development, Transport and the Environment. KEHA Centre – the Development and Administrative Centre for TE Offices and ELY Centres. TEM – Ministry of Economic Affairs and Employment. See the discussion on the institutional set-up of ALMP provision in Finland in Chapter 2.

3.4.1. The availability and quality of data on ALMPs and jobseekers are limited due to outdated IT infrastructure

This section discusses the data collection on ALMPs, data used for ALMP statistics by TEM, and the data transfer process to Statistics Finland for research purposes.

The IT infrastructure supporting ALMP provision and data collection is largely outdated

Since 2016, the KEHA Centre is responsible for providing the IT infrastructure for the system of ALMP provision, while previously it was the responsibility of TEM. The IT infrastructure needs to support TE Offices to implement ALMPs, and jobseekers and employers to interact with TE Offices, and collect data within the service provision process. The IT infrastructure also needs to support ELY Centres to steer TE Offices and manage the provision of ALMPs regionally.

The operational IT system for ALMP provision (URA register) is largely a legacy system, dating back to 1997. The development of the new operational IT system started in 2017, but so far only the new job mediation platform for employers and jobseekers "Job Market Finland" was adopted in 2021. Nonetheless, this new platform has already become an example of a good practice for other countries as it includes AI tools to support users in refining and streamlining vacancy descriptions and jobseekers (OECD, 2022[1]). Job Market Finland analyses the data provided by employers and jobseekers, as well as taxonomies of tasks and skill needs linked to each occupation to recommend suitable jobs (see Box 3.2).

Box 3.2. Job Market Finland is a modern digital tool to match jobseekers and vacancies

Job Market Finland is a sophisticated digital tool aiming to match jobseekers and vacancies effectively, combining a set of AI algorithms to overcome discrepancies in the descriptions of job postings and jobseeker profiles. The "competence recommender" within the tool helps jobseekers to create their profiles, generating their set of competencies based on different possible inputs, such as keywords, CVs, motivation letters or job advertisements.

Above all, the tool uses the European Skills, Competences, Qualifications and Occupations classification (ESCO), which provides a description of about 3 000 occupations and the skills and competencies associated with these occupations. Second, the tool includes detailed descriptions of about 600 occupations. The AI algorithms enable to look for suitable vacancies by occupation, competencies, skills and work preferences, regardless of the exact wording used for job search, in the profile or the vacancy. The competency-based search enables the jobseeker to discover suitable occupations and careers that they might not realise to look for otherwise.

Job Market Finland includes also a so-called "relevance model" to pre-process vacancies and extract only those words for matching that indeed describe the job, rather than the general description and objectives of the company. The relevance model has been trained to extract the relevant content in Finnish, Swedish and English, so that the model is able to process vacancies in any of these languages.

Although the Job Market Finland platform provides also general information for jobseekers, such as information on available training and education schemes, the digital tool does not currently enable to map skill gaps or suggest relevant training. Finland could consider using the data collected via the matching processes of Job Market Finland to detect those occupations that have higher employment potential for the specific profiles of jobseekers. The jobseeker could get recommendations on occupations to focus on, skills needed to be acquired to improve job finding prospects, as well as training and education to acquire the respective skills. Furthermore, such mapping of individual skill gaps and training needs could educate referrals to the training programmes within the ALMP system in Finland, such as the labour market training and self-motivated education discussed more specifically in the next chapters of this report.

The data generated within Labour Market Finland could also be used for generating labour market information, particularly to assess and anticipate skill needs in Finland. Such analyses would complement well the qualitative Occupational Barometer (see Chapter 2), as well as the analytical exercises conducted by TEM using the PES vacancy data on occupations, the data in Statistics Finland or survey data.

Source: Ministry of Economic Affairs and Employment (2022[28]), *Työpoliittinen aikakauskirja* 4/2022, https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164474/TAK_4_2022.pdf; Niittylä (2021[29]), *Using AI for jobseeking*, https://tyomarkkinatori.fi/en/blogit/vieraskyna-niittyla-tekoalyn-hyodyntaminen-tyopaikkojen-haussa; Niittylä (2020[30]), *Utilising artificial intelligence in the application process for ESCO competence,* https://tyomarkkinatori.fi/en/blogit/vieraskyna-niittyla-tekoalyn-hyodyntaminen-esco-osaamisten-haussa; Vänskä (2020[31]), *The Good AI*, https://kokeile.tyomarkkinatori.fi/en/blogit/hyva-tekoaly.

However, the staff in TE Offices and ELY Centres still use the legacy IT system to register jobseekers and provide ALMPs, which can affect the quality of the data used in ALMP impact evaluations, in addition to not supporting well the ALMP provision in general. According to the employment counsellors from TE offices from different parts of Finland interviewed for the current assessment, the URA system supports basic customer services, but has many shortcomings. For example, some data fields that could be structured (classifications and code lists) are implemented as free text, not supporting well the work of employment counsellors or statistics and research based on these data. Some fields are mandatory to fill,

although employment counsellors have rarely information on these issues, resulting in incorrect data in the database. For example, jobseeker destination is often marked to be unknown, although in reality the destination is known to be employment, but only the mandatory details on employment contract are unknown. This issue also reveals that the URA system is not sufficiently exchanging data with other administrative registers in Finland to fully support services provision, as well as data accuracy. In addition, at times policy design has been changed quicker than it has been possible to adjust the URA system to continuously support service provision and data collection.

The data analytics tools linked to the operational IT system are currently still in their infancy and need to be developed further together with the overall modernisation of the IT infrastructure in the ALMP system. The KEHA Centre has started to build some pre-defined reports for internal monitoring using QlikView (a Business Intelligence tool) and plans to change it to Power BI over some years. Considerable investments are needed to develop a data analytics system that provides monitoring reports and dashboards for TE Offices and employment counsellors to manage their work and caseloads, for ELY Centres to steer TE Offices and regional ALMP provision, for TEM to govern the overall ALMP system, and potentially also for the public to support interactive knowledge dissemination on ALMPs.

The outdated IT infrastructure, including the data analytics tools, also hinders the data availability for statistics, analysis and research on ALMPs. The KEHA Centre has the possibility to flexibly query any data from the operational database of URA system for research needs (following an application for the data, assessment and permission), and occasionally ad-hoc queries have been made in practice. Anonymised data and grouped data could be then shared by the KEHA Centre directly, while data to be pseudonymised and linked with other data sources could be made available for the researchers via Statistics Finland. Nevertheless, the dataset that is regularly shared with Statistics Finland (via TEM) and is the core dataset for ALMP evaluation, is inflexible and has remained the same over the past years regardless of changes in policy design.

The modernisation of the IT infrastructure for ALMP provision is further complicated by the on-going reform

The replacement of the URA system has been cumbersome due to challenges in allocating funding for the IT developments and finding experts to drive the modernisation. The KEHA Centre outsources a large share of the IT development, while 13 staff members are engaged with IT developments in-house. When the KEHA Centre was created in 2015 and responsibilities were transferred to it from TEM over 2015-16, not all resources and staff that were planned to be shifted together with responsibilities were in practice shifted. Also, not all tasks regarding the administration and support of TE Offices and ELY Centres were transferred, potentially making the governance model and change processes more complicated. The budget for the KEHA Centre is assigned yearly without longer-term commitments, which complicates recruitment and signing contracts extending over one year.

A sudden decision on changing the institutional set-up of ALMP provision in September 2021 has further delayed the IT modernisation process, as the exact responsibilities of each stakeholder need to be assigned before the IT solutions to support these roles can be defined. The government still aims to have a central operational IT system and the data analytics platform (Data Warehouse or Data Lake together with Business Intelligence tools) to support data availability for monitoring and evaluation, as well as evidence-based policy making more generally. Yet, some municipalities might want to set up their own IT platforms that have simply interfaces with the national IT infrastructure, while most of the municipalities are not likely to have such capacity and need to rely solely on the national IT infrastructure. Hence, before the developments of the national IT infrastructure can be adjusted to the new institutional set-up, the government and TEM need to be clear on which responsibilities will be transferred to municipalities, what will be their scope of freedom regarding their operating models and business processes in implementing

ALMPs, and what kind of support needs to be provided by the central level (e.g. via the KEHA Centre or its successor in the future).

As TEM is governing the KEHA Centre, it needs to drive and enable the process of modernisation of the IT infrastructure to ensure well-performing ALMP provision, as well as data availability for evidence generation. First, TEM needs to be in a systematic dialogue with the KEHA Centre in preparing for the reform and developing the IT infrastructure to meet the needs of the new set-up. The operational IT system needs to maximise its support to its users, i.e. employment counsellors. Hence, the planning, development and testing needs to involve employment counsellors (currently in the TE Offices, but to be transferred to the municipalities), as well as the municipalities more generally. The plans need to be discussed not only with those municipalities that are eager to go through the reform, have been part of the piloting of the new system and tend to have a higher capacity, but also with those for which the reform might be challenging and thus might have different needs for support. Second, in addition to the careful design of data exchange and integration of IT infrastructure between the core stakeholders of ALMP provision, data exchanges with other administrative registers need to be strengthened to support employment counsellors, jobseekers and employers, as well as to ensure data accuracy. Data already available in other administrative registers should not be collected again but received automatically, implementing so the “once-only” data collection principle.[15] The implementation of such data exchanges assumes a careful analysis of data needs and amendments in regulations to provide a solid legal basis for the relevant data exchanges. Third, TEM (and the government) needs to find sufficient and sustainable funding model for the KEHA Centre to enable it to carry out its responsibilities, particularly in terms of projects and developments that have longer than one year horizon.

TEM receives monthly datasets from the KEHA Centre for statistics and analysis

An automatic data exchange is set up to provide data from the URA system to TEM. TEM receives a pre-defined set of individual level data each month on jobseekers, ALMPs and vacancies already a few days after the end of month to produce timely statistics based on these data. The data files are uploaded in the internal statistical system of TEM to facilitate producing standard reports quickly.

A mixture of automatic and manual quality checks takes place before data transfer to TEM, after uploading data in the TEM system and before publishing the statistics based on the data. Errors in data transfer and uploading do happen sometimes, in which case the quality checks enable to identify them and re-run the processes. Data quality can be affected also by incorrect data inputs (see the discussion in the beginning of this section) but are generally harder to identify by the data quality checks in the KEHA Centre and TEM. Hence, the approach by TEM is to ensure the correct data inputs simply via guidelines and training for TE Offices, which however might not be sufficient in the context of an outdated IT infrastructure.

The statistics produced on URA data is currently limited to the inflexible and static pre-defined dataset that is regularly shared with TEM. The outdated IT infrastructure of the URA system does not enable to easily adjust the regular data exchange, and thus statistics by TEM does not capture well the changes in ALMP design during the past years.

Along with developing a new operational IT system for ALMP provision, setting up a new data transfer system is planned as well. The new IT infrastructure is expected to be fully in place within around five years, with some modules and data transfer from them being ready sooner. The current plan foresees setting up a Data Warehouse in KEHA Centre, and TEM also receiving the data inputs from the same Data Warehouse. The Data Warehouse would include data from those municipalities that use the central operational IT system for service provision, as well as those that use their own, but still deliver the data to the central Data Warehouse. Regardless of having data from all municipalities, an additional challenge for TEM in terms of statistics (and potentially for analysis and research) will be how to classify and compare municipality-specific ALMPs.

For research purposes, ALMP data need be linked with other datasets

The individual level dataset that TEM receives from the KEHA Centre, is further shared with Statistics Finland that uses the data for national statistics and can make these available for researchers (see also next subsection). As the data on ALMPs and jobseekers are safely available via Statistics Finland, TEM refers the researchers there for data needs rather than sharing data directly with researchers. In case researchers' data needs go beyond the dataset shared by KEHA Centre with TEM, they are referred to request data from the KEHA Centre directly, which can make *ad hoc* data queries to the URA system. Nonetheless, most of the research projects (and particularly ALMP evaluations) need additional data from other registers in any case, such as data on benefits, employment, education or other socio-economic characteristics. Thus, ALMP data for research purposes are increasingly being used via Statistics Finland, rather than shared by TEM, the KEHA Centre or in co-operation with another administrative register directly.

Also, TEM itself uses data from Statistics Finland to be able to link ALMP data with additional datasets (although also direct *ad hoc* data exchanges with other registers have been sometimes practiced in the past). Linking ALMP data with employment data is of particular importance as the jobseeker destination data after ALMP participation are essentially missing in the URA system. To facilitate ALMP monitoring, TEM has outsourced statistics on labour market status after ALMP participation (ALMP gross impact) fully to Statistics Finland, receiving aggregate ready-made statistics on ALMP participants entering employment, education and other destinations.

3.4.2. Researchers can access rich data securely via Statistics Finland

This section discusses how Statistics Finland makes data and metadata available for research, including the legal basis for data sharing, the technology to ensure data protection and the process to link data across registers.

Only Statistics Finland and Findata have a legal basis to link and share data for research

The amendments of the Statistics Act[16] in 2013 made it possible for Statistics Finland to share their data remotely for research purposes in a pseudonymised form. This has significantly widened the data availability for researchers as the uniquely pseudonymised format (contrary to the anonymised format used previously) enables researchers access full datasets from Statistics Finland and combine different datasets according to the research needs. At the same time, the data can be used securely, as these never leave the databases of Statistics Finland. Nonetheless, the Statistics Act gives Statistics Finland the right to collect data for statistics and to share these data for research purposes, but not explicitly collect data for research purposes.

As the current Statistics Act only mentions sharing data for research purposes and does not explain in more detail how Statistics Finland supports research activities, the Ministry of Finance that governs Statistics Finland has initiated further amendments in the Statistics Act. The new regulation would list research services (above all providing data for research) explicitly among the tasks of Statistics Finland, in addition to producing statistics. This amendment is important as research services of Statistics Finland have become a very important part of its activities. For example, at the end of 2020 there were in total 1 590 valid user licences to access data for research in Statistics Finland (Statistics Finland, n.d.[32]).

The only other organisation that has the right to collect, link and share administrative data for secondary use (statistics, analysis, research) in Finland is Findata. The legal foundation giving Findata the authority to share data for research purposes rests in the Act on the Secondary Use of Health and Social Data of 2019. Findata provides secure access to data on social and health care services, such as data from the Social Insurance Institution of Finland (Kela), the Finnish Institute for Health and Welfare (THL), the Finnish Centre for Pensions and the electronic health record system (Kanta) (Magazanik, 2022[33]), thus having a

different data coverage and purpose than Statistics Finland. The data in Findata are not the core datasets relevant for ALMP evaluation but could be used as supporting data to define credible counterfactual or measure additional outcomes of policies. In this case, the data of Findata could be used via Statistics Finland.

Accessing data in Statistics Finland can be costly

Currently, Statistics Finland does not receive any funding from the Ministry of Finance for research services, i.e. the processes to share data for research purposes. In the past years, these services have received only some project-based funding, such as via Academy of Finland, the Finnish Innovation Fund Sitra and the sister organisation Findata under the Ministry of Social Affairs and Health. The amendments in the Statistics Act could provide Statistics Finland with a stronger case to also receive funding for its research services.

As long as the research services are not funded from the state budget, the researchers accessing data are covering the associated costs themselves. However, this funding has not covered in the past all related costs. In addition, as also the other tasks of Statistics Finland are not sufficiently funded, it is not possible to cross-subsidise the research services from its other funding. This has resulted in shortage of staff to carry out the research services and long waiting times for researchers to access the data (see the discussion in the next subsection).

To overcome the funding issues, Statistics Finland increased significantly its prices to access data for research in the beginning of 2022 from already a high level. Already before the increase, a yearly access to data to carry out a policy impact evaluation could have easily costed around EUR 10 000 a year for a small group of researchers. From 2022 onwards, the research services have been further modernised (such as the possibility to access newer data during the contract with Statistics Finland, but then the contract is binding for at least two years), but at higher prices than before. This means that a significantly higher share of budgets for research projects needs to be allocated to data access. In addition, ALMP impact evaluations would be possible only essentially within publicly procured research projects, and not for example for purely academic reasons.

The research services of Statistics Finland are expensive particularly due to the IT infrastructure to enable secure remote access to data. Depending on the required computing power of the virtual machine and the number of users, the yearly fees in 2022 range from EUR 3 000 to close to EUR 7 000 (or even more if five or more researchers in the project). The fees for data depend on which specific datasets are needed for the project and whether these need to be updated during the project duration. As the main datasets are split to many smaller datasets and charged individually, the costs for the data can well match the costs of renting the virtual machine. The fees for contracting and licencing are added to the total cost of data access.

When Statistics Finland opened remote access to research data in 2013, it initially used its own servers, which was a cheaper solution, but was not sufficient for researchers due to too low computing power. In that set up, one researcher running a model needing more computing power, could block the work of all other researchers.

The current solution of remote access to the data in Statistics Finland uses the servers of the CSC, which is an organisation providing IT services for research purposes and is owned by the Ministry of Education and Culture and the universities in Finland (CSC, n.d.[34]). This solution enables the researchers choose the computing power needed for their research projects and the capacity is not affected anymore by how many other researchers are simultaneously accessing data from Statistics Finland in other projects. Yet, this more convenient solution comes at a higher cost, as these services of the CSC are to be covered by Statistics Finland, which in turn bills the researchers.

Statistics Finland has well-established, transparent and secure processes for data sharing, although granting access can take time

Statistics Finland has set up a standard procedure for researchers to apply and access data, which is communicated on its website in detail for transparency and clarity (Statistics Finland, n.d.[32]). In the data application, researchers need to provide information on the intended use of the data, the research plan, pledges of secrecy and applicant's details, as well as other documents depending on the specificities of the application (e.g. licences from other authorities are needed if additional data need to be linked with the data in Statistics Finland).

The processing of the data request depends on the extent and complexity of the data to be used, such as whether the application must be approved by the Board of Statistical Ethics. While the less complicated applications could be theoretically processed in a couple of weeks, the processing time has tended to stretch over a few months in most cases during the past years. The waiting times for data access have taken even around one year in case additional data from administrative registers have been requested to be linked with the data already in Statistics Finland. The research services have become very popular among the researchers, while the resources to process this volume of data requests have not kept up in Statistics Finland. Although this might change somewhat with the increased prices of research services. Nonetheless, Finland needs to consider funding the research services of Statistics Finland sustainably for example from the state budget to cut the data application processing times and cap research data prices to support evidence generation across policy fields and encourage research not only tied to a current political agenda.

Once the application to access the data is approved and datasets prepared, the researcher can access the data remotely and securely. The researcher can access the remote access system of Statistics Finland called FIONA from their local workstation and use the data via various software programmes like STATA, R, Python, SAS and SPSS (Statistics Finland, n.d.[35]). However, the results of the data analysis can be transferred from the system only after a review by Statistics Finland to ensure data protection (e.g. no individual level data can be displayed among the results).

A strong authentication is enforced for researchers to access FIONA, while offering a choice of identity authentication systems. In addition to authentication systems specific to Finland (State Treasury identification service, Haka, Suomi.fi), an international authentication service by EduGAIN[17] is enabled to facilitate international researchers to use data in Statistics Finland.

A rich set of administrative data are collected by Statistics Finland

Contrary to quite a few other OECD countries, Finland uses a unique identification number (the social security number) for all its residents across administrative registers, enabling to link data accurately across registers. The same holds for URA data on jobseekers. The exceptional cases are recent migrants that might receive some services before they have got their social security number.

Statistics Finland has a long experience of linking data across administrative registers. Finland was the second country in the world to conduct population census based on register data in 1990, preceded by a test census in 1987. This required mapping different registers and data available in them and identifying data relevant for statistics and evidence more generally. Hence, data exchange between Statistics Finland and various registers in Finland has been established often many years ago, although continuous work takes place to keep the data exchange up to date when the IT infrastructure, collected data and policies change.

Statistics Finland has an elaborate Data Warehouse to manage data for statistics and from which data for research purposes are shared. About 97% of these data are administrative data from different registers, while only 3% are survey data. Register data are generally preferred to survey data as these are covering the whole population and are more efficient to collect.

The core data shared for research purposes are data in the Data Warehouse of Statistics Finland received via interfaces to different registers. Researchers can apply to registers for additional data to be sent to Statistics Finland for research purposes, which can be then used together with the data in Statistics Finland (after pseudonymisation) but deleted after the end of the project. The registers can also share additional pre-defined datasets with Statistics Finland on their initiative to meet the research needs, that Statistics Finland can keep in their Data Warehouse although not used for statistics and make available for researchers when requested. If a research project needs only data available in Findata, a data application would have to be made directly to Findata and used via their IT infrastructure. However, if additional data from Statistics Finland are needed, then the respective data from Findata are transferred to the system of Statistics Finland to enable linking the different datasets.

As a result, the scope of data available in Statistics Finland can support well ALMP impact evaluations. Firstly, the datasets include the original pre-defined datasets on jobseekers, ALMPs and vacancies from URA system, as well as individual level indicators calculated for statistics based on URA data, that can on some occasions further facilitate conducting evaluations. Secondly, the datasets include rich data on socio-economic characteristics of the population to construct a counterfactual for the evaluation (e.g. family composition, household data), as well as observe the effects of ALMPs on different outcomes (using employment, education and firm data). All these datasets are updated annually in Statistics Finland. Further discussion on the coverage and format of the data in Statistics Finland for ALMP impact evaluations is in Chapter 4 and in the technical report accompanying the current review (OECD, 2023[27]).

Nevertheless, the data are generally not fit to evaluate very recent policy changes. First, many datasets are shared with Statistics Finland only once a year. Second, it takes some time for the registers to share their data with Statistics Finland (some time needed for data accuracy as some registers are more prone to retrospective changes than others, some time needed for data to be extracted, transformed and loaded, etc.). Third, the data shared by the registers with Statistics Finland go through a thorough quality check and pseudonymisation. And fourth, Statistics Finland is not currently sharing the data for research purposes before they have published the official statistics based on these data. As a result, as of October 2022, the data on ALMPs and jobseekers are available up to 2021, qualification data up to 2020 and employment data up to 2019. An impact evaluation to be conducted in the end of 2022 could thus not easily evaluate ALMPs provided after 2018, and the time lag is even longer if looking at long-term effects would be aimed at. In addition, the currently available datasets do not enable conducting credible cost-benefit analyses of ALMPs, as Statistics Finland does not have comprehensive data on the costs of services, measures and benefits for jobseekers (see Section 3.3.5). Further modernisation of the IT infrastructure across the public sector in Finland is necessary to ensure better data quality and coverage in the registers, prepare operational data better for data analytics and establish more timely and frequent automatic data exchanges. Better financing of Statistics Finland would enable it to shorten data preparation periods and produce more timely statistics, simultaneously shortening the time lags of research data as a side effect.

Elaborate metadata are available, but support to researchers could go further

Statistics Finland collects metadata systematically together with data from the administrative registers. It uses a metadata system called Metsy that is based on the Generic Statistical Information Model (GSIM, an international reference framework for statistical information) (Kaukonen, 2019[36]).[18] The metadata are, however, at the moment only rather technical details and not descriptions of the data. For, example the metadata do not address changes in time series data due to changes in policy design, taxes, currency or legislation more generally. Or, at times no definitions for missing values or zero values and their differences in practice. Also, metadata regarding ALMP data from the URA system are not at times complete and clear for researchers.

While Statistics Finland has worked on improving the metadata over the years, the metadata quality is still limited due to what is shared with Statistics Finland by the registers, as well as due to the shortage of resources of Statistics Finland to improve metadata quality. The Ministry of Finance is aiming to address this challenge by establishing the criteria for metadata that administrative registers should follow.

Statistics Finland publishes the metadata on the data available for research in its Taika metadata catalogue[19] that has been developed in co-operation with registers and researchers and in use since 2016 (Statistics Finland, 2016[37]). First, this catalogue enables researchers to define their data request as the catalogue displays which variables are available and their time coverage. Second, the Taika catalogue contains variable descriptions to help researchers during the data analysis. In addition to elaborate definitions in Finnish, most metadata on core datasets are also available in English to support international researchers.

In case of technical questions on research data, researchers can contact a dedicated email account in Statistics Finland. Statistics Finland can then check if there could be errors with certain variables, or changes in metadata, but cannot provide advice on data use or methodologies and policy changes originating from the underlying administrative register. Statistics Finland backlogs the questions to investigate the technical aspects further in case of recurrent issues.

Further descriptions of data and information on addressing certain issues in the data are also not collected and shared by any other organisation, regardless of different researchers facing continuously the same issues. For example, regarding ALMP evaluation, all researchers need to address mismatches between the original files from the URA system and the indicators calculated by Statistics Finland, consider changes in ALMP time series data due to changes in policy design and address issues concerning matching flow and stock data (see more on the issues in Chapter 4 and OECD (2023[27]). Each researcher group has to then partly address the same issues again, map the policy changes, develop the same coding to prepare data for analysis, although these steps have been already previously conducted by other researchers. This approach is inefficient and can mean that the ministry outsourcing the research needs to essentially pay several times for the same work.

In the outsourced research projects, TEM should request that the researchers share with TEM also the codes used to conduct the research and publish these together with the reports discussing the results. First, this would bring down the costs of research projects as some of the work does not need to be repeated again (enable TEM to get more evidence within the same budget). Second, publishing the codes would serve as an additional quality assurance, as the exact methodology would be more transparent for the research community and any questionable steps in the methodology could be identified easier.

3.5. Conclusion

TEM has been able to generate sound evidence on key ALMPs by using its internal capacity, outsourcing research projects and co-operating with other ministries. The limited resources are steered to cover the priority research needs, the good practices to procure and steer research projects ensure quality in evidence and the generated evidence is systematically disseminated. Conducting research on ALMPs is well facilitated by Statistics Finland, which is able to share rich data linked across many administrative registers securely with researchers. As a driver of policy design in the field of ALMPs, TEM needs to ensure that it has sufficient evidence for policy design and invest in its internal research capacity, outsourced research projects and the IT infrastructure to collect data on ALMP provision accordingly.

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Notes

[1] The Employment and Social Development Canada is a department of the Government of Canada responsible for social programs and the labour market, including the evaluation of the related policies.

[2] There used to be a research department also in TEM, but since the change in paradigm, it is no longer the case.

[3] https://tem.fi/tyopoliittinen-aikakauskirja.

[4] https://tem.fi/tem-analyyseja-sarja.

[5] https://tem.fi/tilastotiedote-vuosijulkaisut1.

[6] https://www.temtyollisyyskatsaus.fi/graph/tkat/tkat.aspx?ssid=220925224129674&lang=EN&top=0#.

[7] https://statfin.stat.fi/PxWeb/pxweb/en/StatFin/.

[8] https://tietokayttoon.fi/julkaisut.

[9] A qualitative assessment of analysis and research activities of TEM conducted by external evaluators in April to October 2022 has been a good initiative for TEM to understand better the scope for improvement in evidence generation (Ruuskanen and Obstbaum, 2022[38]). Nevertheless, a regular systematic process of peer reviews would enable timely feedback on the research methodologies and interpretation of research results.

[10] A method to assess whether a policy produces the effects expected by the policy makers (i.e. the policy outcomes). The method involves comparing the expected outcomes for two groups i) those, who benefitted from a policy or programme (the “treatment group”), with ii) those, who did not benefit from the policy, but are otherwise similar to the treatment group (the “comparison/control group”). The comparison group provides information on “what would have happened to the participants in a policy in case they had not participated in it”.

[11] Impact evaluation methods that use a counterfactual, but are not based on randomised assignment of the intervention, are called “quasi-experimental methods”.

[12] The “gold standard” in counterfactual impact evaluations is often considered to be an RCT, in which participation and non-participation in the intervention is allocated randomly and the outcomes of these two (or more) groups are measured. Randomising participation in the intervention minimises the chances that there are systematic differences between participants and non-participants, which are not related to participation in the intervention.

[13] Selection bias occurs when the reasons for which an individual participates in an intervention are correlated with the (potential) outcomes this individual would observe under participation or non-participation. Ensuring that the estimated impact is free of selection bias is one of the major objectives and challenges for any impact evaluation.

[14] In addition, an authority called Findata shares social and health care data for research purposes (see https://findata.fi/en/). However, this initiative does not include ALMP and labour market data and is thus not discussed extensively in this report.

[15] The (cross-border) “once-only” data collection principle is for example encouraged by the European Commission in its Single Digital Gateway Regulation to support Digital Single Market, as well as in the eGovernment Action Plan. Once-only principle aims at more efficient administrative processes for both the government and the citizens and at a higher data accuracy, as any data relevant for a public sector organisation should be collected only once and consequently shared with others securely if needed for service provision.

[16] https://www.stat.fi/meta/lait/statistics-act-2802004_en.html.

[17] https://edugain.org/.

[18] GSIM is a reference framework of internationally agreed definitions, attributes and relationships that describe the pieces of information used in the production of official statistics and enables generic descriptions of the definition, management and use of data and metadata throughout the statistical production process (Linnerud, 2020[39]).

[19] https://taika.stat.fi/en/.

4 Training for jobseekers and impact evaluation methodology

Finland is among the highest spenders on training programmes for unemployed people in the OECD. These programmes help jobseekers acquire and augment the skills they need to prosper in the labour market. This chapter provides details on the two main training programmes that are available to jobseekers and sets them in context of one other. It then goes on to describe the methods and data used in the following chapters of this report to evaluate the impact of these programmes on individuals' subsequent outcomes in the labour market. In particular, it describes how an occupational index is constructed to aid insight into how jobseekers move between occupations following training.

4.1. Introduction

Finland has a well-funded suite of training programmes to support jobseekers. Spending on training programmes for jobseekers, at 0.36% of GDP in 2020, was the second highest in the OECD. A comprehensive set of programmes to enhance the skills of jobseekers and improve their ability to find good jobs is an essential component to a well-functioning labour market. This is particularly important for Finland, which has a relatively high rate of job displacements and lower re-employment probabilities for older and young workers, blue-collar workers and the less well educated (OECD, 2016[1]). Training policies to match skills demand and supply are crucial in this context. Knowing which policies work and for whom can help the government to target policies when necessary and ensure they are cost-effective.

The first section of this chapter provides a description of the training programmes available to jobseekers in Finland, statistics on their frequency, information on how they are delivered and on the characteristics of participants. The following section then outlines requirements for conducting an impact evaluation of these programmes and the methodology that is used in this report (Chapters 5, 6 and 7) to estimate the impact of selected training programmes on employment, earnings and occupational mobility. It includes a discussion of the outcomes analysed and the sample time period that is chosen. The final section describes the linked administrative data that are used for the impact evaluation.

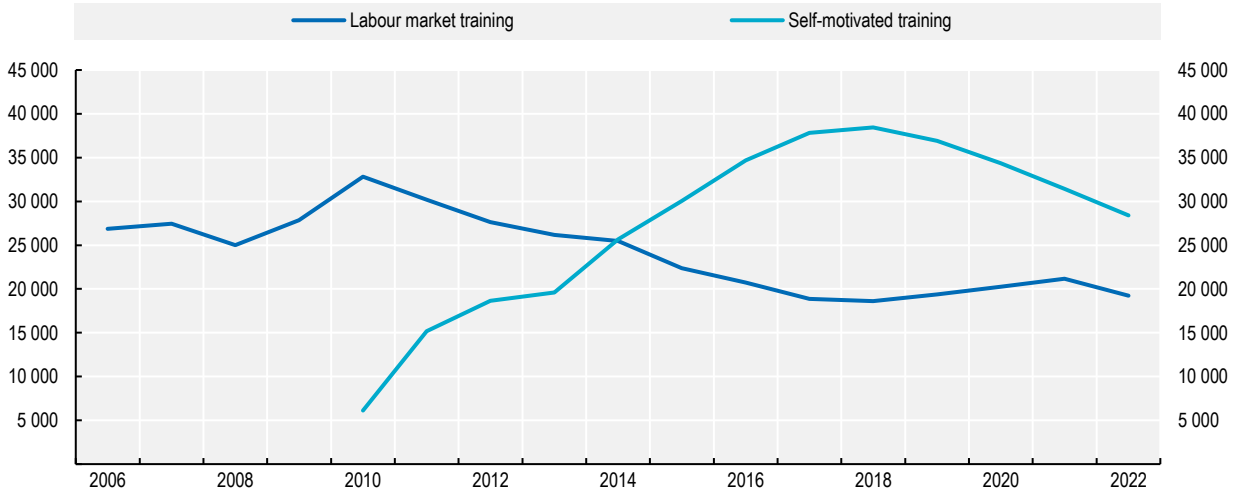
4.2. Training for jobseekers

The two primary training offers for jobseekers in Finland are labour market training (LMT) and self-motivated training (SMT). LMT has been a core part of the training offer for unemployed jobseekers for many years, providing jobseekers with vocationally focused courses to improve employment opportunities. LMT offers short programmes which are primarily organised via local employment offices and their organising bodies. The introduction of SMT for jobseekers in 2010 allowed individuals to engage long-format studies to up degree level (enrolment in the formal education system) without any job search requirements and to retain their unemployment benefit for up to two years. Because these courses existed previously and were provided by the Ministry of Education and Culture (OKM), when speaking about SMT, it is less about provision of the courses themselves and more about the financial incentives for jobseekers to participate in existing courses. In this sense SMT has opened up a more financially advantageous route to undertake longer-format education without job search requirements. It has coincided with a fall in LMT participation, as jobseekers take advantage of the new funding available to them (Figure 4.1). While LMT also allows participation in training without job search requirements, but in short format training courses, SMT offered a complementary alternative for longer format education by similarly paying unemployment benefit and removing requirements to look for work (work search requirements are discussed in Chapter 2). However, as of May 2022, legislation introduced work search requirements on SMT participants. Participants are now required to apply for three jobs every quarter. Legislation is currently in parliament to increase that number to four from January 2023, for individuals who already hold tertiary level qualifications. In practice, this removes the possibility of using SMT as a means to complete education whilst remaining inactive in the labour market.

The total number of individuals participating in LMT reached a peak in 2010, at just under 33 000 participants, the year that SMT commenced. Since 2016 LMT participants have plateaued at around 20 000 per year. In the same period, jobseekers participating in SMT have averaged 35 000 per annum. In part this reflects the longer duration of the latter, which means that for the same number of individuals starting training, participation at any point in time will be higher as fewer have completed their training.

Figure 4.1. Labour market training and self-motivated training form the core learning provision for jobseekers

Average number of participants in training programmes for jobseekers by year



Note: Yearly totals are simple averages of monthly participant volumes. Year 2022 refers to the average from January to August.
Source: Statistics Finland's free-of-charge statistical databases, https://statfin.stat.fi/PXWeb/pxweb/en/StatFin/.

StatLink https://stat.link/z579ib

4.2.1. Self-motivated training lasts longer than labour market training

The introduction of SMT augmented the ecosystem of training in which it is possible for jobseekers to participate in. SMT supports self-directed courses sought by jobseekers which are organised as part of the general education system provided by OKM. These studies are more directly aimed at finishing longer-format education, whereas LMT offers a route to shorter courses which are more vocational in nature. Although there can be some crossover between the two, they are largely complementary in the types of training that they offer.

Table 4.1 details the underlying composition of the duration of training, to demonstrate how LMT and SMT differ. SMT has a median duration of 341 days, meaning that half of participants spend around a year or longer on their studies and one-quarter spend 21 months (648 days) or longer. By contrast, LMT is comprised of much shorter training spells. The median duration for programmes starting between 2014 and 2018 is 43 days and only the top 5% of individuals spend a year or longer participating in a training course. A large number of these LMT courses are very short in duration. The duration of an LMT course for the bottom 5% of individuals, when ordered by duration, is only one day in length. The bottom 25% of individuals have a course length of one working week (five days) or fewer. These very short courses may relate to short vocational courses or capture the sitting of an exam relating to a previous longer spell of training. The introduction of SMT does not seem to have altered the composition of LMT courses, from a durational perspective, with the average duration of the latter remaining fairly constant over time.

These differences in terms of length and the types of skill that the two programmes equip jobseekers with may or may not lead to different labour market outcomes, following training participation. The direct impact of duration is likely to manifest itself in a larger lock-in period for SMT, as participants are kept out of active job search for longer. Shorter LMT courses which are more vocational in nature, may have better links to immediate skills demands by employers. Whereas the increased focus of SMT on courses of an academic nature may equip jobseekers with a more in-depth set of academic skills that permits more scope for career changes, either across sector or profession and allowing for greater increases to salaries.

It is important to ensure that both sets of training provision are focussed so that the skills augmented and improved by jobseekers are those that are demanded in the labour market. As outlined in Chapter 2, the Centres for Economic Development, Transport and the Environment support the TE offices to plan and procure LMT courses. This is completed via their forecasting function and anticipation of future local development needs. For SMT, no such co-ordination exists. Whilst counsellors in TE offices have to agree that the courses proposed by individuals will help to improve their labour market opportunities, it is up to the individual to identify and propose the course and no aggregate skills needs assessment takes place to determine how the needs of employers in the labour market can be met by participants in SMT. The national Skills Assessment and Anticipation exercise (OSKA) in Estonia provides a good example on how to integrate systematic information on occupational demand and supply to ensure well targeted training courses. OSKA is used systematically by the Estonian Unemployment Insurance Fund (EUIF) to guide the provision of training programmes to prevent unemployment. OSKA is also used, alongside the EUIF's Occupational Barometer, which measures supply and demand of different occupations (and is itself based upon Finland's Occupational Barometer), to provide guidance to employment counsellors when they refer jobseekers to training programmes (OECD, 2021[2]). Ensuring similar use of Finland's occupational barometer, when ALMPs are divested to municipalities in 2024, will help to ensure that local training provision is appropriately targeted.

In order to consider LMT programmes that may give rise to sufficient amounts of skill accumulation to affect transitions in the labour market, the main impact evaluation in Chapter 6 utilises courses longer than three months to assess their impacts. This is to avoid incorporation of the very short duration courses in the first instance. Table 4.1 also shows the distribution of duration for the courses longer than 90 days. The mean length of these courses is 219 days (around seven months) in length. Sensitivity analysis is then conducted by relaxing this constraint and reviewing all LMT spells, to determine what difference to results this makes.

Table 4.1. Self-motivated training is much longer than labour market training

Duration of programme participation in days

Programme	Distribution of duration					
	5th	25th	Median	75th	95th	Mean
Labour market training	1	5	43	138	365	94
of which: over 90 days	93	124	179	283	458	219
Self-motivated training	37	173	341	648	731	389

Note: Average values for all programmes starting in the years 2014-18, excluding those programmes with missing end dates. Distribution over 90 days taken as an approximation for courses longer than three months in length.
Source: OECD calculations on TEM data accessed via Statistics Finland. Data on jobseekers participating in self-motivated training or labour market training.

StatLink https://stat.link/dsyx8u

4.2.2. Self-motivated training

In 2010, a change in the law enabled jobseekers to retain their unemployment benefit for a maximum period of 24 months while enrolling in SMT (although it is possible for the studies to continue for longer than this period, without the associated unemployment benefit continuing). This opened an educational pathway for jobseekers to continue formal studies in the education system that may have been previously interrupted. The broader question for the introduction of SMT relates to how it interacts with other adult education provision. In particular, adults who wish to participate in further education were already able to access funding from KELA, via the study subsidy (SS) grants. These grants are available to individuals

continuing in secondary or higher education. The amount of study grant available is typically lower than the monetary benefits of SMT. For a single individual aged over 18 living alone, the study grant provides a payment of EUR 268, compared to a payment of EUR 742 of labour market subsidy that an individual might receive in an equivalent typical month (21.5 x EUR 34.5 daily rate) if they were registered as a jobseeker. The introduction of SMT then creates a route to education attainment that is more financially advantageous to individuals. This comes with the requirement that the PES considers the studies to be of benefit to an individual's employment prospects, which acts as a form of targeting mechanism. However, it is important to know whether this introduction of SMT is of benefit to both government and wider society. This will be reviewed in Chapter 7. In addition to the study grants, adults may also be eligible for the Adult Education Allowance which subsidises continuing studies, though as this is dependent on at least eight years of employment history, it has stricter eligibility requirements than the study grants.

The formulation of the SMT training provision means that it is dependent upon the jobseeker to find a suitable education curriculum and successfully apply to it, which is then subsequently reviewed and approved by the TE Office. If the course is deemed suitable for the jobseeker's development, they can continue receiving their unemployment benefit for a period of 24 months whilst studying. These duration restrictions were relaxed during the COVID-19 pandemic, for those studies whose maximum periods would be reached between 1 July and 31 December 2020. There is a requirement for monitoring of progress on the studies to continue receiving unemployment benefit, which is conducted by KELA or the individual unemployment funds (which confirm with the participant that they are still undertaking their studies). This is to ensure jobseekers are in the process of acquiring education, because during this period they no longer have to fulfil commitments on job search, as they are deemed to be studying full-time. Jobseekers must be 25 years or older to participate in this training in the mainstream for SMT, though this restriction is relaxed for those participating under the Integration Act (such as migrants accessing basic education).

The requirement for full-time study means that in practice education has to consist of certain features. It must either be to complete a bachelor's or master's degree (PhD courses are excluded from the policy), a vocational upper secondary qualification, or preparatory training towards it, or a general upper secondary education for young people. If it is not studying towards a bachelor's or master's degree, the training must be for a minimum of 25 hours per week (or the credit equivalent of this time, five credits in the current system). If jobseekers are returning to prior studies, they may only receive unemployment benefit for self-motivated study if at least one year has passed since they last participated in that education.

To date, there has only been one partial impact evaluation of SMT, which was inconclusive in its findings. This means that an important gap exists in explaining how SMT helps jobseekers. Whilst there have been several prior studies on LMT, which demonstrate its use, the same evidence-building is necessary for SMT.

4.2.3. Labour market training

LMT is open to all jobseekers, though in practice applicants under 20 are unlikely to be selected. The application process for jobseekers is primarily online. Indeed, on the Job Market Finland website (the public employment service's online vacancy matching platform, see Chapter 3), the application portal for vocational LMT sits directly alongside the main portal for registration of e-services, demonstrating the primacy of the offering within the public employment services. To be eligible for LMT, people should be either unemployed, or about to become unemployed (although it is possible for working individuals to be admitted). The individual's need for training is reviewed by the TE Offices.

Labour market training is organised into different tranches, dependent on its function and purpose. One element of LMT is integration training for immigrants, particularly to help them with aspects relating to language and culture. This is not the main focus of this report. The other branch is vocational training to help directly with employment. Within this branch there are four categories. Training aimed directly at obtaining qualifications are financed and steered by OKM. This comprises around one-third of total LMT offered (Alasalmi et al., 2022[3]). Training not aiming for qualifications, including short-term training for

licences or professional authorisations are paid for by the Ministry of Economic Affairs and Employment (TEM) and also accounts for around one-third of training. Entrepreneurship training is also funded by TEM and is aimed at helping individuals to start new businesses and accounts for around 10% of training participants. The final strand is training that is jointly acquired directly with employers and is co-funded by them. This strand is aimed to integrating training measures directly in business, particularly those smaller and medium enterprises for whom there may be less in the way of corporate human resource functions to assume these roles. This training accounts for around 20% of the total vocational training spending in LMT.

The application process for starting on a LMT course is directed towards empowering jobseekers to make the application themselves. To apply for LMT, individuals use the 'E-services' section of the TE online services. Guidance is given online on how to apply and the participation criteria of each of the courses. A link to LMT training has been added also on the Job Market Finland website, taking individuals to a dedicated website run by TE services, which has over 1 000 courses available across Finland. Courses are found using a search facility. Search can be narrowed using user-defined key words, by professional group, location or publication date. For each course, a description on the course content, eligibility and any additional information is provided. Information is also provided on the location, the start and end dates, the training provider and the number of study places available. The current application process may be subject to some change, as transfer of responsibilities to municipalities is undertaken. Those individuals living in municipalities that are in one of the pilot areas receive guidance on application from their local municipality. The local TE Office still discusses the training needs with the jobseeker to decide on the training referral.

To determine an individual's suitability for a specific LMT course after an application has been received, the TE Office reviews several criteria. These include the skills and characteristics required in the field of study, student interests and motivation, and prior education, training and work experience. These are used to assess whether the training will address a gap in candidates' skills, will complement existing experience, and how it will augment the possibilities of finding a job. Selection for course participants is completed using a mixture of the information provided in the application, interviews and aptitude tests. Training can also be preceded by an initial period, to determine participants suitability for continuing in the training.

A team consisting of experts from the employment and economic development services and a representative of the training provider makes selection decisions. An employer representative may also participate in the selection if they are part of planning and funding the training in question. For studies that lead to a higher education qualification and for individually procured training places, the training and education bodies first make an offer of admission for the student, which the TE Office then reviews and makes a final decision on participation. The TE Office responsible for the student selections informs the candidates about its participation decision by letter, typically within about a month after the application period for the training has closed.

4.2.4. Who does training cater to?

This section reviews the underlying characteristics of participants in training, to understand who utilises these training courses. Across a number of characteristics LMT and SMT cater to similar individuals. However, there are some important differences. SMT participants are 25% more likely to be female than LMT. They are 12% less likely to have had either a lower level or manual profession prior to the training spell and 14% more likely to live in an urban location (Table 4.2). Both LMT and SMT cater to individuals that are less likely to be Finnish citizens, or to be a native Finnish speaker, than the average jobseeker.

In addition, Table 4.2 shows that SMT participants have more children on average than LMT participants but also a lower level of labour market attachment. In particular mothers, who are either married or in a partnership, are more likely than the average to participate in the programme. In the calendar year prior to the commencement of training, they spent fewer months in both unemployment and employment, and they earned less, suggesting more time spent out of the labour market altogether.

In addition to LMT and SMT participants, Table 4.2 also provides characteristics of jobseekers who have been paid SS in the year of their unemployment spell. These individuals are much younger, less likely to have children, more likely to be Finnish and have had less labour market attachment in the year prior to their unemployment spell, than their peers participating in LMT and SMT.

Table 4.2. Participants in self-motivated training and labour market training share some similarities and differences

Training participants characteristics

	Labour market training	Self-motivated training	Study subsidy	All jobseekers
Age (mean years)	35.85	34.84	22.44	39.35
Number of children (mean)	0.67	0.94	0.43	0.53
Months unemployed in previous year	4.07	3.13	1.38	3.89
Months employed in previous year	3.69	2.51	2.86	5.34
Annual earned income (Euro, nominal)	EUR 8 800	EUR 4 100	EUR 3 500	EUR 12 100
Proportion of participants:				
Lower worker	26.2%	25.1%	25.2%	43.0%
Owns car	40.9%	37.7%	21.6%	46.4%
Native Finnish language	65.1%	61.4%	89.2%	85.3%
Finnish citizen	76.7%	77.6%	97.1%	93.2%
Upper secondary education	41.6%	40.8%	44.3%	49.7%
Tertiary education	15.8%	16.5%	6.8%	14.2%
Single	59.7%	58%	93%	67.9%
Rural	17.0%	14.5%	16.9%	20.7%
Female	48%	59.9%	51%	44.8%
Single father	19.4%	18.7%	16.9%	22.3%
Single mother	9.4%	10.5%	16.8%	11.5%
Partnered mother	22.2%	34.5%	6.9%	15.7%

Note: All values are averages of monthly data over the five years 2014 to 2018 inclusive. Variables are extracted from FOLK basic data and relate to the end of the year before the start of the training/unemployment spell. Study subsidy participants identified by looking at unemployment spells where an individual has a study subsidy paid in the same year. Lower worker defined using variable "sose", defined as the categories "lower level" workers and "manual" workers, with values between 40 and 60. Upper secondary education defined using the variable ututu_aste recording highest education level, using values "3" for upper secondary and "9" for unknown. Rural defined using variable maka, values "M4", "M6" and "M7". Single defined using variable sivs, value "unmarried", so excludes divorced or widowed individuals.
Source: OECD analysis of Statistics Finland databases, using FOLK and TEM datasets.

StatLink https://stat.link/awu3ho

4.2.5. More detailed course information is available for SMT than LMT

Course information is available for SMT that permits insights into both the level and area of study that education relates to. To do this, it is necessary to link data from TEM to the annual education data from OKM, to look at what courses SMT are related to. However, this method is not completely accurate. Around 12% of TEM SMT records do not match to a corresponding record in the same year. A further 6% of courses which are matched, relate to courses that directly continue on the same course from the previous year (excluding vocational courses, where this is possible), which should not be possible on SMT, unless the participant has been in receipt of a work-related benefit payment. A very small minority (0.2%) of studies are identified as doctoral studies, which are also precluded on SMT. However, even with these caveats, it is possible to build up a broad picture of the type of education pursued by participants.

Figure 4.2 shows that the largest proportion of SMT education is vocational studies at the upper secondary level. In 2018 this education accounted for 64% of all studies and its share has risen over time, from 44% in 2010, at the inception of SMT. Bachelors degrees made up a further 16% of education, completed either at a polytechnic university (13%) or university (3%), whilst Masters degrees accounted for 4%. The proportion studying either Bachelors or Masters has fallen over time as vocational studies have increased.

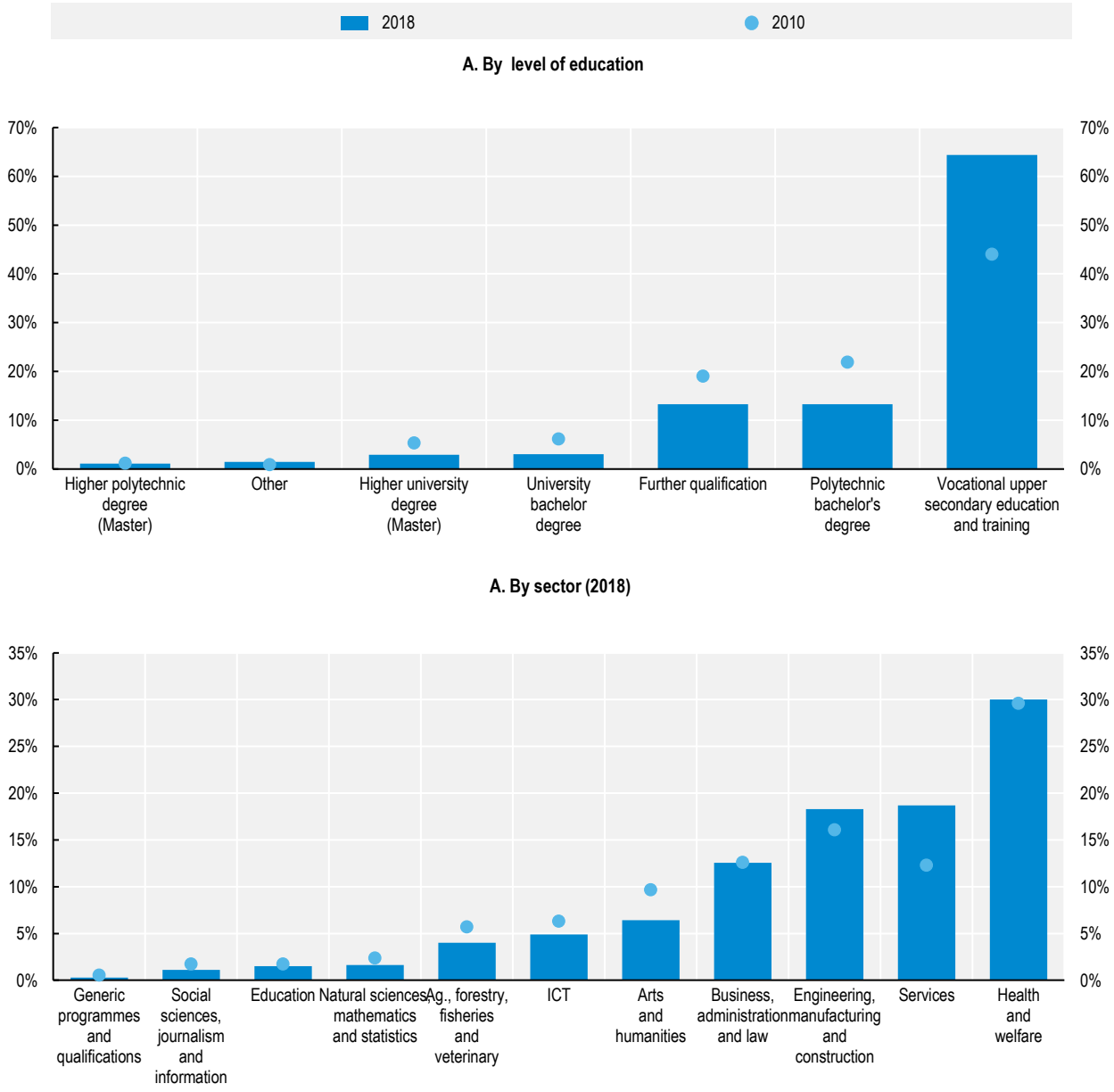
In terms of the field of study, health and welfare makes up the largest share at around 30% of total course enrolments in 2018, a share that has remained constant from its level in 2010. This focus on the health care sector aligns well with needs of the Finnish economy, where it is frequently cited as the occupation with the highest number of skills shortages (for example, as of the Occupational Barometer published in Autumn 2022, the health care sector dominated the top shortage occupations (TEM, 2022[4]), remaining largely consistent with similar shortages in 2019, see (OECD, 2020[5])). However, without knowing how many of these individuals are re-training from different sectors, it is difficult to be precise about how much of the labour shortage this education addresses. That said, ensuring that individuals are equipped with the up-to-date skills relevant for the occupation, should still have a relieving effect on skill needs of the bottle-neck sector.

Services and engineering, manufacturing and construction account for just over 18% respectively, whilst business, administration and law accounts for 13%. Together, these four sectors account for around 80% of all courses, a level which has persisted over the period 2014-18, rising from 71% when SMT was introduced. This growth has come largely from the services and engineering, manufacturing and construction courses, replacing courses in ICT, arts and humanities, and agriculture, forestry, fisheries and veterinary.

By contrast, there is a lack of information on the content of LMT training available in the Statistics Finland datasets. Figure 4.3 presents information on the distribution of the type of LMT course undertaken by jobseekers. The biggest category of LMT course is “missing” where no information exists on the type of course, this represents around 40% of LMT course participants This is followed by the category “Other”, which presumably covers all courses which are not categorised into either Primary, Secondary, Post-Secondary or General types. Because of the lack of documentation on precisely what each category means (see (OECD, 2023[6]) for more details on metadata), it is challenging to provide more insight into what these courses contain and the precise level of study they pertain to. However, notwithstanding this point, the fact remains that around 70% of courses have either missing information or are included within the “catch-all” category of Other. Furthermore, it is difficult to determine precisely how the courses relate to the different sources of LMT training outlined in Section 4.2.3. An attempt to replicate the methodology of Alasalmi et al. (2022[3]), to incorporate entrepreneurship training type, met with little success, as only 1 500 such courses could be identified (despite attempts to use the same variable to classify it), out of a dataset with 3 million entries. The result of this means it is difficult to conduct anything more than an aggregate analysis of LMT courses.

Figure 4.2. SMT has a large share of vocational upper secondary training and is orientated towards health sector

Self-motivated training (SMT) courses by education level and field of study

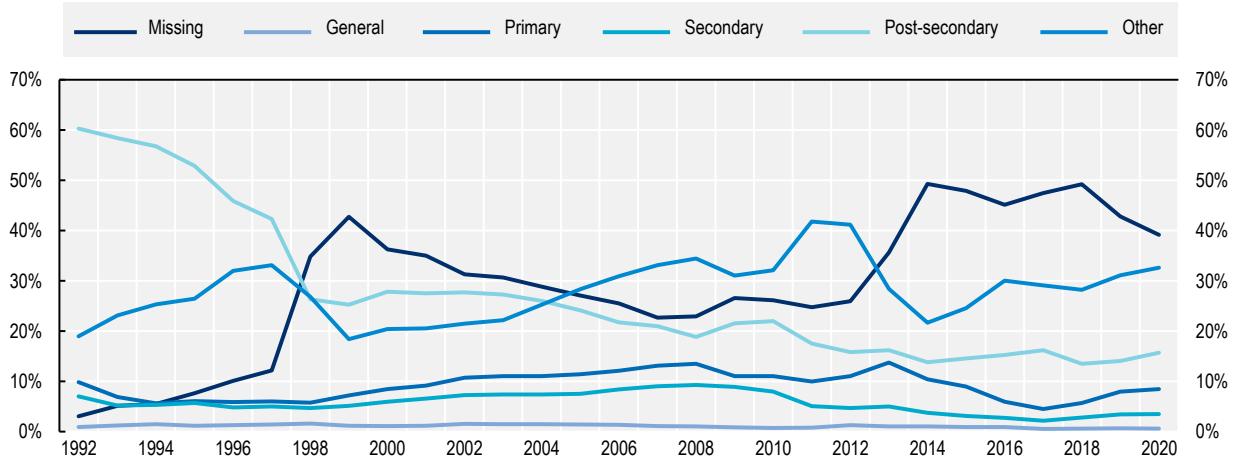


Note: Data relates to first recorded record of SMT per individual, all subsequent records dropped. 12% of these records cannot be matched with a corresponding entry in the annual education dataset, so are dropped from the analysis. In Panel A, "Other" encompasses: Specialist qualifications, General upper secondary education and Doctoral or equivalent.
Source: OECD analysis of TEM and EDUCATION datasets accessed via Statistics Finland.

StatLink https://stat.link/ago1kt

Figure 4.3. There is a large proportion of missing values on LMT course type in the dataset of Statistics Finland

Distribution of labour market training (LMT) course type



Note: Course type defined using the variable "klaji."
Source: OECD analysis of TEM administrative data accessed via Statistics Finland.

StatLink https://stat.link/067q2s

4.3. Training impact analysis technique and data sample

This section describes the requirements for impact evaluation of both SMT and LMT. It then discusses the methodology used to perform impact analysis. The evaluation of the impact of both programmes uses quasi-experimental techniques alongside linked administrative data, for reasons which will be outlined. The section outlines the different outcomes that are evaluated and the time period used for the analysis before providing detail on how the analysis provides new information on how occupational status is affected by training.

4.3.1. Requirements for impact evaluation of LMT and SMT

In order to evaluate the training programmes, there are a number of factors to consider across the two primary dimensions of data and methodology. The methodology chosen to evaluate the programme also has an influence over what data may be required. If a trial which randomly picks participants has been used to test a programme, then it means that researchers can be sure that the only difference between individuals is the enrolment in that particular programme. In this case, the only data that are needed are those on the outcomes which the research wants to address. For example, to study impacts on earnings, then earnings data are required for participants and non-participants. However, more often it is the case that programmes are implemented first and then evaluated afterwards. This is true for both LMT and SMT. In this instance rich data on individuals are necessary to ensure that participants in a programme are compared only to non-participants that are similar to them. Usually in studies of ALMP, this includes detailed socio-economic data and previous labour market and unemployment histories. Without these data, there is a risk that any impact evaluation conducted actually just reflects innate differences between individuals, rather than any differences driven directly by the programme in question. Fortunately, Finland has a rich seam of such information to draw upon, which is detailed below in Section 4.4.

On data, the requirements are determined by the outcomes the research intends to examine and the methodology chosen to conduct that research. For LMT and SMT, the primary goal is to establish whether the training courses help individuals to progress in the labour market. This progression could take many forms, including higher earnings, better attachment to jobs, or jobs with more flexible working conditions. There are limitations to the extent that all of these data might be available to researchers. Typically, it is easier to get information which is required by authorities to administer government services, such as the receipt of information on earnings to process tax liabilities. Data on whether an individual has more flexible working conditions, or subjectively "enjoys" their job may only be possible via a survey conducted to elicit this information. The information available for Finland and its use in the analysis is detailed in Section 4.4. When conducting evaluations on ALMPs, usually individual level information is preferred to aggregated information, as it allows a much more detailed examination to be conducted. Particularly where programmes vary over time, or individuals access at different time periods and for different durations, individual level data permit much more precision in looking at these dynamics. Finland possesses a vast array of linkable administrative data in the repository held by Statistics Finland, which are available for researchers to use for analysis. Such data and the ability to link them are key to performing causal impact analysis on policies for which randomisation has not been possible (OECD, 2020[7]).The high-quality individual-level data held by Statistics Finland permit investigations into the dynamics mentioned above.

4.3.2. Quasi-experimental techniques are used to estimate programme impact

LMT and SMT are live-running programmes and participation in them is not determined randomly, so it is necessary to analyse their impact using a non-experimental technique. Individuals choose whether to participate in training, which means that it is possible for participants to be different to non-participants in non-trivial dimensions. It is not viable simply to compare labour market outcomes of participants to non-participants, because they may well have experienced different labour market outcomes anyway, in the absence of programme participation. For example, if a training programme for jobseekers attracted young participants and outcomes for participants were simply compared to non-participants, the impact would likely contain some of the effects of their age rather than the programme itself. Younger people tend to have less labour market experience and so earn less than their older counterparts, regardless of training. The results from such a comparison would be subject to "bias", meaning that the estimates do not reflect the true impact of the programme.

Quasi-experimental methods need to be employed to evaluate SMT and LMT effectiveness. There exist several different methods for estimating causal programme impacts using non-experimental data (see (OECD, 2020[8]) for a discussion). Some of these methods rest on the type of information that is available to the researcher. OECD (2023[6]) provides more discussion of the outcomes framework that underpins the analysis conducted in Chapters 5, 6 and 7 of this report.

The analysis in this report relies on using rich administrative data to compare participants to non-participants and propensity score matching is used to select a control group of non-participants to compare to participants. Using this technique, all the observable characteristics that affect participation in a programme are summarised into a "propensity score". This single estimate captures the likelihood of an individual participating in the programme and reflects all the known characteristics that affect this likelihood. For this process to ensure that estimated programme effects are unbiased and reflect its true impact, it must be the case that the characteristics which affect participation in the programme and also affect outcomes are used to calculate the propensity score. For example, consider the case of degree education. Suppose having a degree made someone more likely to earn more, even in the absence of a training programme. Suppose it also made it more likely for that person to participate in a training programme. Not accounting for having a degree in the propensity score would lead to an over-estimation of the effects of training on income. The estimation would attribute increased earnings to training, when in fact it simply reflected the fact that more people with degrees participated in the training. By explicitly controlling for this in the propensity score, the treatment and control groups would compare only people with similar levels of

degree attainment. The discussion in Section 4.4 demonstrates the rich set of variables available in this analysis mean that there can be confidence that these types of omission do not occur. This leads to the second important assumption that needs to be met for matching to be valid. There needs to be a good balance on the propensity score between treatment and control groups. Similar individuals need to be found to compare to one another. Statistical tests can be conducted to determine that this is the case. These technical details are provided in more detail in the technical report (OECD, 2023[6]).

4.3.3. A range of outcomes are reviewed to holistically evaluate programme impacts

The analysis in Chapters 5 to 7 documents a range of labour market outcomes from SMT and LMT participation, to provide a rich understanding of how the training programmes help to connect people with jobs. It utilises data on income, wages and unemployment spells to analyse how the training programmes affect transitions in the labour market, both into the type of job, the tenure of jobs and the income in those jobs.

Specifically, the evaluation includes the following labour market outcomes:

- Probability of being employed. This probability is measured using a binary outcome variable which is equal to 1 if an individual is employed on the last day of the year, and equal to 0 otherwise.
- Annual earnings. Defined as all earned income in a calendar year.
- Monthly wages. Defined as all earned income in a calendar year divided by months of employment.
- Total annual unemployment duration. Defined as the number of months spent in unemployment in a calendar year.
- Probability of changing occupation. Defined as a binary variable which is equal to 1 if the individual's current occupation is different to their last recorded occupation. The occupation is recorded on the last day of the calendar year.
- Progression in the occupational ladder. Defined as the change in the rank of the current occupation, with respect to the average wages for that occupation, compared to the rank of the last held occupation (see Section 4.3.5).

Sub-groups of participants are also examined to see whether impacts vary

The impact of training may be different for different individuals. For example, a recent study of a training programme in Lithuania found differential impacts by sub-groups and contextualised those found in the meta-analysis by Card, Kluve and Weber (OECD, 2022[9]). In order to determine whether this feature holds true for participants of training in Finland, and to add evidence to that already gathered by other existing studies on Finland (detailed separately for SMT and LMT in Chapters 5 and 6 respectively), the impact analysis in this report is conducted separately for a number of sub-groups: gender, individuals aged under 30 or 50 and above, rural and urban participants and by level of education.

In addition to participant sub-groups, Chapter 7 of this report investigates whether the introduction of SMT changed the provision of training for jobseekers as a whole. Because SMT was introduced nationally in 2010, it brings challenges to analysing how the change to the suite of provision has affected both the composition of jobseekers engaged with training and their outcomes subsequent to that training. This is exacerbated because it entails analysing outcomes so close to the onset of the financial crisis in 2008, which means temporal employment outcomes may be significantly different as the economic cycle progresses. Nevertheless, an exploration of the types of individuals that LMT and SMT cater for and whether outcomes for cohorts as a whole were impacted by this introduction will be an important part of describing how the training ecosystem helps people to connect with jobs (see Chapter 7).

4.3.4. Analysis is conducted on data from 2010 onwards for main outcome variables

To take advantage of the long panel data held by Statistics Finland, programmes are evaluated from 2010 onwards. The use of a longer time series of data has two primary advantages. It allows outcomes (such as earnings and employment) to be analysed for a longer period after the initial training period. This is of extra importance for programmes with longer durations, such as training programmes. A longer period spent participating in an ALMP outside of the labour market increases the potential of foregone earnings, as participants delay job search. However, if this serves to increase either the probability of employment, or the earnings whilst in employment, over the longer term the programme may still be beneficial. Therefore, evaluating longer term outcomes allows an exploration into these dynamics. Secondly, it provides more available data to look at periods before programme participation. This is important when quasi-experimental techniques are being used, which require detailed data on participant characteristics. This helps to ensure that similar individuals are being compared and relies on having individual attributes that are measured prior to participation. As an example, prior unemployment spells can help to compare individuals with similar labour market histories.

The primary reason for starting the analysis in 2010 is twofold. For SMT, it is also the first year of the implementation of SMT, so it means that the participation in this programme is fully captured using this time frame. For occupation data, 2010 is also the first year for which consistent information is available. This means that changes to occupation and moves up and down the job ladder can be captured across time on a consistent basis, starting in 2010.

For the separate analysis on LMT and SMT in Chapters 5 and 6, the cohorts selected are from the years 2012-14. This is related to the data availability, both pre- and post-programme. It means that incorporation of occupational data can be done for two years prior to unemployment, and for outcomes, a full four years of outcomes are available after the initial spell of unemployment.

Chapter 7 reviews how the introduction of SMT in 2010 changed the composition of training for jobseekers and whether or not this impacted upon their outcomes. In order to conduct this analysis it is necessary to evaluate a slightly earlier time period, going back to 2009, the year prior to its introduction. This allows the comparison of cohorts immediately before and after the introduction of SMT. However, by doing this, it precludes using occupation as an outcome variable, instead focusing on the other outcome variables described in the previous section.

The sample includes unemployed jobseekers in December of each year

The analysis uses the FOLK Basic dataset to define its sample of unemployed jobseekers. This is an annual dataset that categorises individuals' status on 31 December of that year. The advantage of this dataset is that it offers a consistent sample frame with the outcomes' variables, which are defined on the same basis. To analyse how training impacts upon jobseekers' occupational mobility, it is necessary to observe their occupation prior to becoming unemployed. For this reason, unemployed individuals without any work experience are excluded from the sample (see the robustness checks of the analysis when including this population in (OECD, 2023[6])). It is possible for employed jobseekers to undertake LMT, but the analysis in the report focusses on how training helps unemployed individuals to improve their labour market outcomes.

4.3.5. Looking beyond employment outcomes to analyse occupational mobility

Occupational mismatch is one of the issues at the heart of unemployment (Patterson et al., 2016[10]; Belot, Kircher and Muller, 2018[11]; Marinescu and Rathelot, 2018[12]). Jobseekers may look for jobs in occupations with few job vacancies while other occupations with relatively more vacancies may not have enough candidates. SMT and LMT can allow jobseekers to gain the skills required to transit to occupations with better employment prospects. It is therefore important to investigate whether jobseekers change occupations and if they move towards better quality occupations as a result of their participation in SMT and LMT. This report estimates indeed the effect of participation in training programmes on occupational mobility.

To address this question a tractable index (OECD[9]; Laporšek et al., 2021[13]) neatly summarise moves along the occupational ladder corresponding to how they reflect underlying income dynamics. For example, an individual may, as a result of an ALMP, move into a lower paying job having also transitioned into an occupation with higher average wages. In this sense, current earnings may not be a good guide to potential earnings, as possibilities for future promotion are unlocked. Therefore, this index provides a rich source of additional information on job transitions that can be utilised alongside more traditional outcomes such as employment rates and earnings, to provide a more insightful analysis on labour market transitions.

The occupational index is built for 122 3-digit ISCO occupations. For each occupation, the average monthly-earned income is computed over the 2012-18 period. The occupations are then ordered from the lowest to the highest paid and attributed a percentile rank. Occupational mobility can thus be measured in income units and in percentiles. To illustrate this measure, Table 4.3 shows the occupational index in euros and in percentiles for the ten bottom, middle and top occupations.

The occupational index distribution for Finland shows that unemployed individuals are disproportionally represented in lower-ranked occupations (in the last job held prior to becoming unemployed) as compared to employed individuals (Figure 4.4). The figure demonstrates the importance of access to good quality training for jobseekers, to enhance their skills and to enable them to unlock job vacancies in occupations with better potential for progression. Figure 4.4 shows data for a cohort of individuals in 2014. This is to align the time period with the statistical analysis conducted in Chapters 5 and 6. However, there is a large degree of stability over time and this pattern continues to be present for later cohorts. On average, unemployed individuals have an occupational index that is approximately 7.7 percentage points lower compared to employed individuals and have mean monthly earnings below the median occupation, corresponding with a drop of EUR 272 on the average occupational monthly earnings. Using this index as a tool for analysis in Chapters 5 and 6 will permit a decomposition into how training programmes affect individuals' subsequent labour market trajectories. Whether they use training primarily to unlock jobs in the same occupation as they were previously employed, or whether they use training as a means to access different occupations. Utilising this decomposition, alongside a more traditional focus on earnings, will give greater insight into mechanics of job moves following unemployment and training and can help to explain how training helps to support re-allocation of labour in Finland.

Table 4.3. Ten bottom, middle and top occupations according to the occupational index

3-digit ISCO	Occupation name	Occupational index (average monthly earnings in euros)	Rank	Occupational index (percentile rank)
Bottom ten occupations				
951	Street and related service workers	814	1	0.8
613	Mixed crop and animal producers	1 143	2	1.6
521	Street and market salespersons	1 236	3	2.5
962	Other elementary workers	1 452	4	3.3
514	Hairdressers, beauticians and related workers	1 515	5	4.1
921	Agricultural, forestry and fishery labourers	1 564	6	4.9
611	Market gardeners and crop growers	1 603	7	5.7
523	Cashiers and ticket clerks	1 611	8	6.6
941	Food preparation assistants	1 665	9	7.4
911	Domestic, hotel and office cleaners and helpers	1 730	10	8.2
Ten occupations in the middle				
322	Nursing and midwifery associate professionals	2 828	60	49.2
814	Rubber, plastic and paper products machine operators	2 838	61	50.0
834	Mobile plant operators	2 846	62	50.8
742	Electronics and telecommunications installers and repairers	2 868	63	51.6
723	Machinery mechanics and repairers	2 887	64	52.5
235	Other teaching professionals	2 918	65	53.3
712	Building finishers and related trades workers	2 933	66	54.1
234	Primary school and early childhood teachers	2 938	67	54.9
262	Librarians, archivists and curators	2 963	68	55.7
741	Electrical equipment installers and repairers	2 980	69	56.6
333	Business services agents	2 995	70	57.4
Top ten occupations				
261	Legal professionals	4 838	112	91.8
011	Commissioned armed forces officers	4 882	113	92.6
134	Professional services managers	5 007	114	93.4
132	Manufacturing, mining, construction, and distribution managers	5 042	115	94.3
315	Ship and aircraft controllers and technicians	5 411	116	95.1
111	Legislators and senior officials	5 833	117	95.9
121	Business services and administration managers	5 887	118	96.7
221	Medical doctors	5 934	119	97.5
112	Managing directors and chief executives	6 297	120	98.4
122	Sales, marketing and development managers	6 342	121	99.2
133	Information and communications technology service managers	6 421	122	100.0

Source: OECD calculations based on FOLK datasets.

StatLink https://stat.link/q2wf1a

Figure 4.4. Unemployed individuals are overrepresented in lower-paid occupations and underrepresented in higher-paid occupations

Occupational index distribution for employed and unemployed individuals in Finland in 2014



Note: The heights of the lines indicate the relative share of individuals in occupations whose occupational index in percentiles are on the horizontal axis. The distributions are calculated for all individuals who were employed or unemployed at the end of 2014. Observations with index value above 100 are excluded from the kernel density chart. For unemployed individuals the occupation is their last employment known in the data, prior to becoming unemployed.
Source: OECD calculations based on FOLK datasets.

StatLink https://stat.link/ovb6jd

4.4. Linked administrative data form the basis of the data for evaluation

Statistics Finland offers a catalogue of "off-the-shelf" administrative datasets that external researchers can access. It has a standardised application process and a fee schedule for both data access and the accompanying server capacity to execute analysis on its FIONA secure access server (Statistics Finland, 2022[14]). Researchers can also make requests for bespoke datasets, where charges are made dependent on the amount of time it requires for Statistics Finland staff to prepare the required data.

The analysis in this report uses two primary sources of information in the Statistics Finland repository.

- FOLK data – These consist of several distinct datasets which draw in registry information from a wide variety of administrative sources. The sample these datasets use is usually all individuals that are permanently living in Finland on the last day of the year. These datasets cover several different dimensions including information on the education, family status including presence and age of children, cohabitation status and dates, socio-economic background, household dynamics and rental status, assets, income, taxes paid, periods of training, unemployment and job search, employment firm and industry information. The information contained within these datasets on labour market aspects such as unemployment and training are drawn from the Ministry of Economic Affairs and Employment's (TEM) register data.
- TEM data – These data come directly from TEM and are not processed further by Statistics Finland, in contrast to the data which are processed to make the FOLK datasets. They include much more detailed information on the operational level data that are generated when the TE Offices conduct their labour market activities with jobseekers. These include data on job postings and the requirements of the advertised jobs, information on registered disabilities, data on job-search

activities, actions and associated tasks agreed in individual employment plans, job offers and details about different types of work trials and training. These data provide detailed dynamics on the interaction between TE Offices and jobseekers, but less information on outcomes (in particular, income and job dynamics) and socio-economic characteristics.

The processing of administrative data by Statistics Finland into compiled FOLK datasets brings advantages and disadvantages. Compilation of data into integrated datasets can mean that data preparation for the end user is easier and some aggregation has already been performed. For example, tax return data to tax ministries can often be vast and unwieldy. They may be weekly, fortnightly, monthly or any other frequency which employers pay their staff. This requires significant data processing to assimilate into useable records for analysis. Compiling these data into, for example, an annual income dataset can save researchers lots of data re-work and can prevent inconsistencies that may arise from individuals using different data processing rules. In addition, meta data can be produced to help document and describe the data that are available. Statistics Finland produces meta data for its "off-the-shelf" datasets, which detail the sample framework in the datasets, the time period for the data and the description of variables and their associated values. However, there are some datasets for which meta data have not been translated into English, which include the TEM datasets, which increases the difficulty of use for non-native researchers (see (OECD, 2023[6]) for further details).

However, there is a cautionary note on the production of compiled datasets. Where both the compiled data and the raw data used for its production are available, then it means inconsistencies may still arise, dependent on which data researchers use. Statistics Finland warehouses both the compiled (FOLK) and raw (TEM) data on a number of labour market variables. For example, the number of individuals participating in SMT or LMT appears different if you take this information from FOLK rather than from TEM (see (OECD, 2023[6]) for further details). Without detailed and comprehensive metadata on all the underlying data, it is difficult to determine from the outset which data provide researchers with the "right" answer.

The richness of the FOLK and TEM data means that it is possible to control for most conceivable factors that might bias the outcomes from the impact evaluation if they were not included. Studies have shown that detailed controls for unemployment, socio-economic factors, pre-treatment outcomes, geographical information and short-term labour market histories are sufficient to control for most selection bias and account for bias that might otherwise be explained by factors that are often unobservable in the administrative data. These computations were evaluated on a German training programme, similar in nature to those analysed here, providing more comfort that similar conclusions might be reached with these programmes (Lechner and Wunsch, 2013[15]).

Table 4.4. A rich set of variables is available to control for differences between individuals

Variables used to select non-participants that are alike to training participants

Variables		
Age	Type of dwelling	Educational attainment
Gender	Car ownership	Educational field
Marital status	Native language	Previous unemployment duration and incidence of different unemployment periods
Children – number and ages	Geographical information	Previous annual income (broken into sub-components)
Housing ownership	Previous industry and occupation	Previous ALMP participation

Using the FOLK datasets means that there is a long run of panel data to use for analysis, this is useful to observe long-term outcomes following participation and to control for prior labour market and unemployment histories. The FOLK datasets, which contain all the variables needed to control for differences between individuals, and to review outcomes, run as far back as 1987. In principle it is also possible to derive participation data from these datasets as well, meaning a feasible analysis could go back to 1987. The TEM datasets, which contain more detailed information on interactions of jobseekers with the PES stretch back to 1998, later than the FOLK datasets, but still with a long back series of panel data on which to draw.

The following chapters now go to describe the results for the analysis which has been undertaken using the data and methodology outlined above.

4.5. Conclusion

This chapter has outlined the details of the main training programmes that are available to jobseekers in Finland. Since its introduction, SMT has allowed individuals to retain their unemployment benefits whilst studying for longer-format education up to degree level. Over time the number of individuals studying with this support has increased so that there are more individuals studying via this pathway than there are via LMT, changing the overall nature and type of training and education that jobseekers participate in. In part this reflects the relative duration of courses. LMT courses are vocational and typically much shorter than the studies undertaken using SMT. SMT education is longer-format, part of the formal education system administered by OKM and includes continuation of degree-level education. The programmes also cater to different individuals. SMT participants are more likely to be female, to have more children and are less likely to have previously had a lower level or manual profession.

It was not possible to use a randomised trial to evaluate LMT and SMT, therefore the analysis in the report uses quasi-experimental techniques to ensure that training participants are compared to similar non-participants. It utilises the rich data on personal characteristics that are available at Statistics Finland to make this comparison, so that detailed past labour market outcomes, socio-economic and personal characteristics are accounted for. The rich data held at Statistics Finland also permit a range of labour market outcomes to be assessed, across type of employment and level of income. In addition to this, data held on occupations of individuals allows an occupational index to be constructed. This means training policies can be assessed on a consistent and tractable basis to determine how they influence individual's movements across different occupations.

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5 Evaluation of self-motivated training

This chapter evaluates the impact of self-motivated training on the employment, earnings and occupational mobility of its participants. The impact of SMT participation on changes in occupational quality is also explored. To account for the selection of participants into the programme, the counterfactual impact evaluation deploys a propensity score matching methodology. The estimated effects are examined across sub-groups of unemployed based on their age, gender, education level and urban or rural location. A large lock-in effect is observed, as participants delay job search for education, however, employment levels recover over the longer term. Self-motivated training does not lead, on average, to moves up the occupational ladder. Women and older individuals benefit more on average from self-motivated training relative to their counterparts.

5.1. Introduction

Introduced in Finland in 2010, self-motivated training (SMT) allows jobseekers to enroll in formal education while keeping their unemployment benefits for up to two years. This chapter presents the results of the impact evaluation of the programme, that is, its impact on the outcomes of jobseekers that participate in this programme relative to similar jobseekers who did not participate in SMT but could have benefited from other PES services and programmes.[1] The sample studied consists of jobseekers with an ongoing unemployment spell at the end of years 2012-14. Labour market outcomes (as defined in Chapter 4) are measured from one to four years after this point. After describing the characteristics of participants in SMT, the discussion focuses on the impact of the programme on the employment probability and on earned income. It then explores the impact of SMT on occupational mobility. In both cases, it uses the methodology described in Chapter 4 of this report. This chapter also shows the effects of the programme across different subgroups of the population based on their age, gender, education level and urban or rural location. It then links the results found to previous literature on SMT. The chapter ends with a conclusion section.

5.2. Participants in self-motivated training are compared to a control group obtained through propensity score matching

Individuals who enrol in SMT have different profiles from unemployed individuals who do not participate in it (Table 5.1, columns 1 and 2). Among participants in SMT there is a higher proportion of women (+16 percentage points) and unmarried individuals (+6 percentage points). SMT participants are on average seven years younger than other jobseekers and have more children. SMT participants are also less likely to live in rural areas (-4 percentage points) and alone (-4 percentage points). The level of education is not significantly higher for participants. However, the fields of study differ considerably. General programmes (+4 percentage points) and arts and humanities degrees (+4 percentage points), which are fields where studies are often interrupted, are overrepresented, while engineering diplomas (-13 percentage points) are underrepresented. Similarly, regarding professions prior to SMT participation (for those who had a job), SMT participants are more likely to work in the service and sales industry (+7 percentage points) and less likely to work in craft and related trades (-10 percentage points) or as operators and assemblers (-3 percentage points). Finally, the number of spells and days spent in unemployment over the past (two) year(s) is lower for participants.

This descriptive analysis implies that there is a high degree of self-selection in the programme. This justifies not trying to evaluate SMT by simply comparing its participants and non-participants, because they are not comparable (columns 1 and 2 of Table 5.1). As discussed in Chapter 4, propensity score matching is used to overcome this selection issue. It generates a control group of jobseekers (column 3 of Table 5.1) who are more comparable to SMT participants across observable characteristics than all other jobseekers.

Table 5.1. Participants and non-participants in self-motivated training differ considerably

Comparison of observable characteristics by treatment status

Jobseeker's characteristics	Participants in SMT (treated)	Non-participants in SMT (unmatched)	Control individuals (matched)
History in unemployment			
Unemployment duration until 31 December (in the current spell)	180.66	275.10 (***)	175.99(*)
Number of unemployment spells in previous year	1.13	1.20 (***)	1.18
Number of days in unemployment in previous year	84.44	89.52 (***)	86.96
Number of unemployment spells in previous 2 years	1.87	2.02 (***)	1.92
Number of days in unemployment in previous 2 years	161.45	179.45 (***)	164.90

Jobseeker's characteristics	Participants in SMT (treated)	Non-participants in SMT (unmatched)	Control individuals (matched)
Demographic characteristics			
Finnish national	0.97	0.97 (***)	0.97
Woman	0.58	0.42 (***)	0.57
Age	36.36	43.17 (***)	35.87 (***)
Number of children	1.01	0.68 (***)	0.99
Car ownership	0.49	0.58 (***)	0.49
Marital status			
Unmarried	0.51	0.45 (***)	0.52 (**)
Married	0.37	0.38 (***)	0.36
Divorced	0.13	0.16 (***)	0.12 (**)
Widowed	0.01	0.01 (***)	0.00
Status in the family			
Not belonging to a family	0.27	0.31 (***)	0.27
Head of the family	0.23	0.25 (***)	0.23
Spouse	0.22	0.16 (***)	0.22
Child	0.04	0.06 (***)	0.04
Head of cohabiting family	0.10	0.11 (***)	0.10
Spouse of cohabiting family	0.13	0.09 (***)	0.13
Unknown	0.01	0.02 (***)	0.02
Type of housing			
Detached house	0.36	0.42 (***)	0.35
Terraced house	0.15	0.13 (***)	0.15
Block of flats	0.46	0.41 (***)	0.47
Other building	0.02	0.02	0.02
Living alone	0.23	0.27 (***)	0.23
Municipality type			
Urban	0.75	0.70 (***)	0.75
Semi urban	0.14	0.16 (***)	0.13
Rural	0.11	0.15 (***)	0.11
Language			
Finnish	0.90	0.90	0.90
Swedish	0.02	0.03 (***)	0.02
Other	0.08	0.07 (***)	0.08
Level of education			
Upper secondary or less	0.54	0.55	0.54
Post-secondary non tertiary education	0.01	0.01(***)	0.01
Short cycle tertiary education	0.08	0.08	0.08
Bachelors or equivalent	0.12	0.10 (***)	0.12
Masters or equivalent	0.07	0.07	0.07
Doctoral or equivalent	0.01	0.01	0.01
Unknown	0.17	0.19 (***)	0.17
Field of education			
General programmes	0.09	0.05 (***)	0.09
Education (Teacher training and education science)	0.01	0.01	0.01
Arts and humanities	0.09	0.05 (***)	0.09
Social sciences	0.01	0.01	0.01
Business	0.14	0.12 (***)	0.14
Natural sciences	0.02	0.01 (***)	0.02 (*)
ICT	0.05	0.03 (***)	0.05
Engineering	0.18	0.31 (***)	0.18
Agriculture	0.03	0.03	0.03
Health and welfare	0.08	0.07 (***)	0.08 (*)

Jobseeker's characteristics	Participants in SMT (treated)	Non-participants in SMT (unmatched)	Control individuals (matched)
Services	0.13	0.11 (***)	0.13
Unknown	0.18	0.20 (***)	0.18
Profession of previous occupation			
Armed forces	0.00	0.00 (***)	0.00
Managers	0.01	0.02 (***)	0.01
Professionals	0.13	0.11 (***)	0.13
Clerical support	0.08	0.06 (***)	0.08
Service and sales	0.29	0.22 (***)	0.29
Skilled agricultural, forestry and fishery	0.02	0.02	0.02
Craft and related trades	0.12	0.22 (***)	0.13
Operators and assemblers	0.09	0.12 (***)	0.09
Elementary occupations	0.12	0.13	0.13
Number of observations	**13 766**	**356 947**	**13 121**

SMT: Self-Motivated Training.
Note: *, ** and *** represent a p-value bellow 01; 0.05; and 0.01, respectively. They are displayed for the T-test on the differences between columns 2 and 1 and between columns 3 and 1. Unmatched refers to all unemployed individuals in the sample that do not participate in SMT while matched refers to the individuals identified as comparable to the participants in SMT through nearest-neighbour propensity score matching. This table includes individuals unemployed 31 December 2012, 2013 and 2014 for whom we observe the outcomes of interest (employment status, earnings and occupation) the year before and the four following years.
Within fields of education, general programmes include: basic general programmes (pre-primary, elementary, primary, secondary, etc.); simple and functional literacy and numeracy; and personal development.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/uxbakn

5.3. Self-motivated training has positive employment effects in the long term

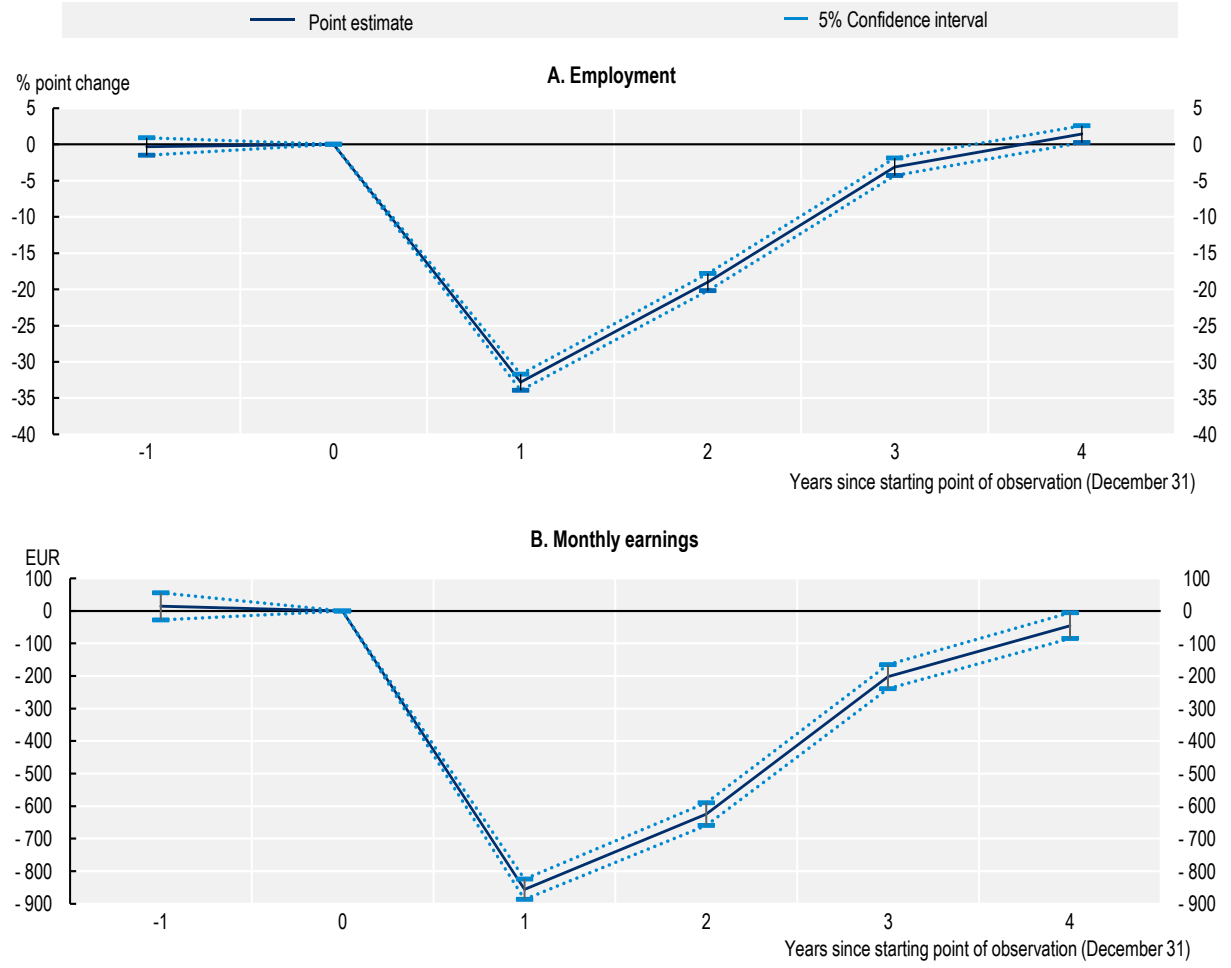
The estimation results show that SMT has a strong negative effect on the probability of being employed in the first years that follow the beginning of the programme by its participants (Figure 5.1, Panel A). This negative effect reaches a peak the year of the start of the programme (recall that this corresponds more precisely to 31 December of the year the programme takes place[2]). At this point, unemployed individuals who participated in the programme (the treated group) are around 33 percentage points less likely to be employed than those who did not participate (control group). Afterwards, this effect diminishes but remains negative during more than two years. Nevertheless, three years after the start of SMT (four years from the starting point of observation) the effect on employment becomes positive (1.4 percentage points) and is statistically significant.

The initially negative effect reflects the so-called "lock-in" effects, which means that participants in SMT do not engage in job search and may not be willing to accept a job until they have completed their training and obtained their qualification.

The estimated effects on monthly earnings also reflect this lock-in effect (Figure 5.1, Panel B). One year after the start of SMT, participants earn on average EUR 855 less than similar individuals in the control group. However, unlike results for employment these results do not become positive during the observation period in this report. Even if considerably smaller in magnitude (EUR -45) the effect on monthly earnings remains negative even at four years from the starting observation point.

Figure 5.1. Self-motivated training has strong lock-in effects in the short term and positive employment effects in the long term

Percentage point change in employment probability (Panel A) and change in monthly earnings (Panel B)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts. Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one (therefore between points zero and one in the graph). Other years are relative to this.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/d9blsp

The median of the estimates on the probability of being employed, found by other studies in the international literature at a similar time horizon, is 5 percentage points (ranging from -2 to 25 percentage points) (Card, Kluve and Weber, 2018[1]). The effect found for SMT is thus more modest but consistent with the fact that the programme can last up to 24 months (see Chapter 4), while classical LMTs are usually shorter. Furthermore, this smaller effect could also relate to the fact that classical LMT are by design more oriented towards labour market integration while SMT concerns formal education. To test whether the smaller effects found on employment and earnings after three years from the start of SMT are due to the larger lock-in imposed by formal studies, the same estimation was run on a smaller sample of unemployed

for whom we can observe these outcomes over one more year (Annex Figure 5.A.1). Indeed, participants in SMT belonging to the 2012-13 cohort of jobseekers experience larger effects in terms of both employment and earnings after four years than after three years from the start of the programme. Four years after the start of the programme, the effects on the employment probability are twice as high as the previous year and the effect on earnings is no longer negative.

5.4. Self-motivated training has slightly negative average effects on upward occupational mobility but stimulates a change in the distribution

SMT allows jobseekers to pursue a full-time degree at an education institution. Obtaining a new degree might encourage jobseekers to explore different career paths and creates opportunities to access new occupations with better employment opportunities. This section first measures if SMT participants (that is treated jobseekers) are more likely to change occupations and if they end up in better quality occupations than the one of their previous employments as compared to their control counterparts (that is those who did not participate in SMT). It then explores if this average effect is linked to important changes in the distribution of occupations.

The estimation shows positive and sizeable effects of SMT on the probability of changing occupations (Figure 5.2, Panel A). Two years after the start of SMT (three years from the starting point of observation), SMT participants are around 2.6 percentage points more likely to have changed occupations relative to the one of their previous employments as compared to non-participants. This estimate goes up to 10 percentage points at four years from the starting observation point.

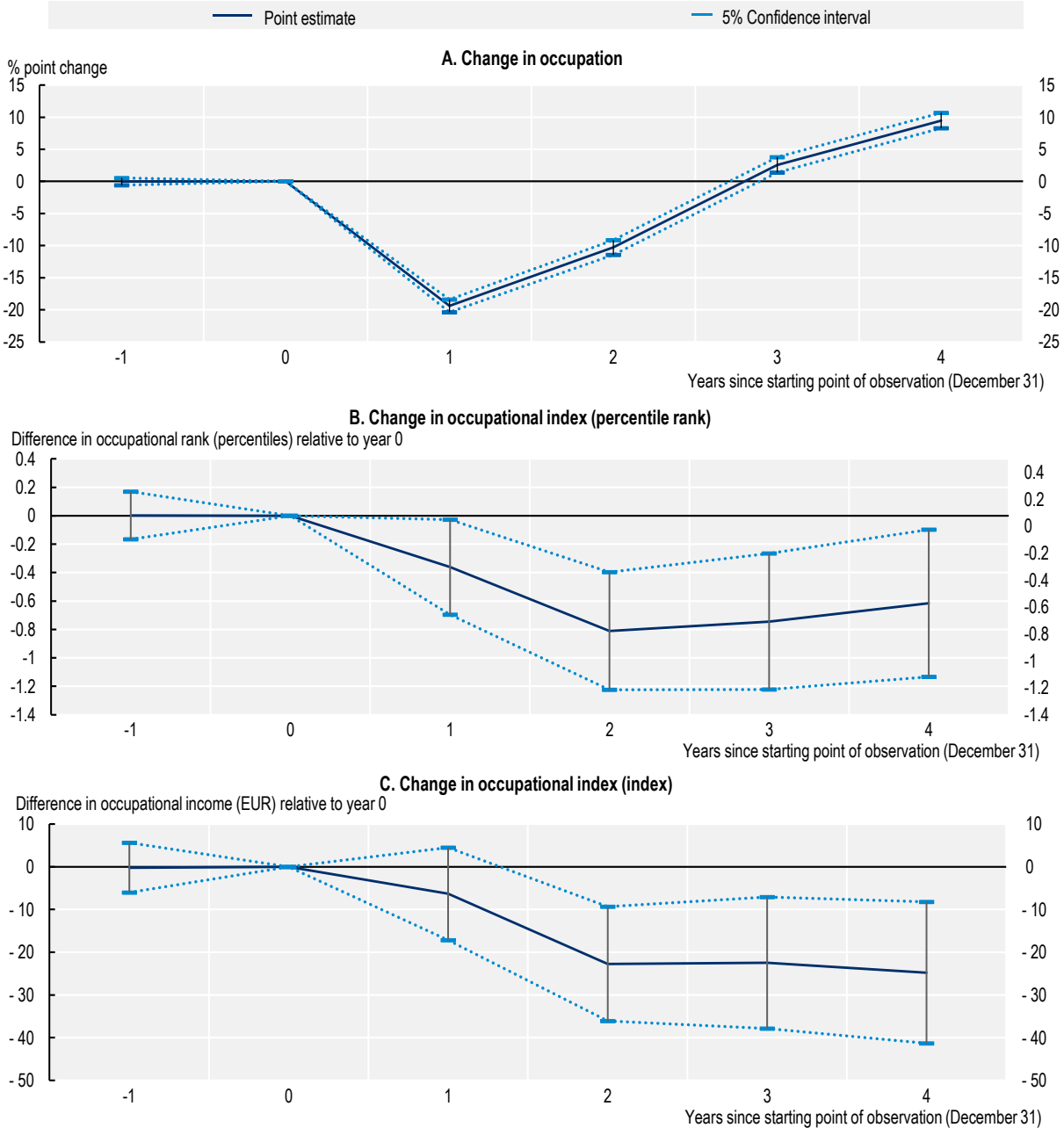
Participants in SMT are more likely to change occupations, but on average they move to lower quality occupations than non-participants (Figure 5.2, Panels B and C). Here, the outcome of interest is the difference between the quality of the last occupation known in a given year (years one to four) and the quality of the occupation of jobseekers' previous employment at the starting observation point (year zero). As explained in Chapter 4, the quality of occupations is measured by an occupational index that builds on Finnish data on earnings at the occupation level from 2010 to 2018. It measures quality both as a percentile rank and in monetary units (occupational earnings in euros). The estimation shows slightly negative effects on upward occupational mobility for SMT participants that are persistent over time. The difference in the occupational index between year four and the staring observation point is around 0.6 percentage points lower for individuals benefiting from SMT than for similar individuals in the control group (Figure 5.2, Panel B). SMT participants end up in occupations that pay on average EUR 25 less per month than their previous occupation as compared to non-SMT participants (Figure 5.2, Panel C).

This slight negative effect on upward occupational mobility is an average effect that does not tell much about how SMT changed the shape of the distribution of occupations. This effect could come from a homogenous shift along the distribution, but different tails of the distribution could also be disproportionately affected. To explore the distributional effect of SMT, 0 plots the distribution of the occupational index (in percentiles) of SMT participants and non-participants respectively, at the starting point of observation (before SMT participation) and four years after this point (three years after SMT starts).

Between the starting point of observation and four years after this date, lower-ranked occupations (between the 6th and the 24th percentile) are slightly less represented among non-participants while some middle-low, middle and middle-top occupations become marginally more frequent. The distribution of occupations for SMT participants experienced stronger changes. As compared to non-participants, lower-ranked occupations end up even more underrepresented, there is a higher boost in middle-low (from around the 24th to the 34th percentile) and middle occupations, and a slight decrease in middle-top occupations (70th to 80th percentile). All in all, these results suggest that the null average effect of SMT participation on the occupational ladder is aggregating a decrease in the frequency of bottom and top occupations in favour of occupations in the middle of the distribution.

Figure 5.2. Self-motivated training increases the chances of changing occupation but with slightly negative effects on upward occupational mobility

Change in the probability of changing occupation (Panel A), change in the occupational index in percentile rank relative to year 0 (Panel B) and change in the occupational index in earnings units relative to year 0 (Panel C)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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5.5. Women and older individuals benefit more from self-motivated training and high educated individuals lose in terms of job quality

While the results presented in the previous section have focussed on the aggregate effects of SMT, this section provides separate estimates across subgroups of unemployed. Studying whether the effect of SMT differs between subgroups of the population gives insight on how the programme acts on individuals and allows to better understand the mechanisms behind its impact. Furthermore, by identifying for whom the policy works and for whom it does not, such analysis could inform the targeting, but also it could lead to redesigning the programme to increase its effectiveness. The sample is divided along several jobseeker characteristics: (i) gender, (ii) age, (iii) level of education and (vi) urban vs. rural municipality of residence.

Women seem to benefit more from SMT than men. Three years after the start of the programme (four years from the starting point of observation), the effect on employment and earnings is positive and significant for women (4 percentage points and EUR 104 respectively) and negative for men (-2 percentage points and EUR -248) (Figure 5.3, Panels A and B). In terms of upward occupational mobility, both men and women experience an almost null effect (Figure 5.3, Panel C). Thus, regarding gender, SMT is already attracting individuals more likely to benefit from it since women are more likely to participate (Section 5.2). This result echoes the meta-analysis conducted by Card, Kluve and Weber (Card, Kluve and Weber, 2018[1]) in which the authors find that programmes targeted at women are more effective than the average programme or programmes targeted towards men.

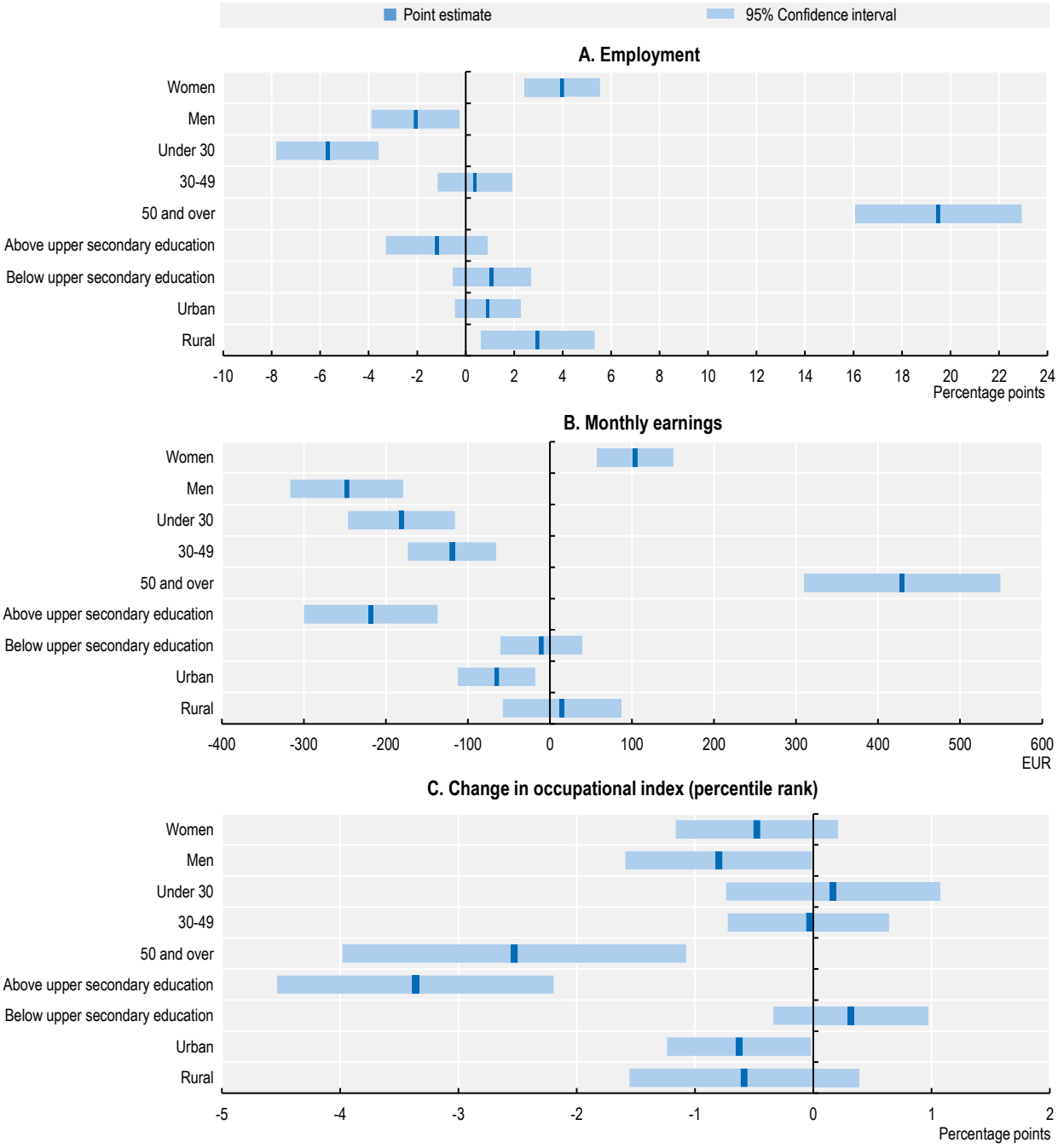
The results also vary by age. Individuals aged 50 and over are the subgroup of the population for whom the effects of SMT on employment and earnings are the largest (19.5 percentage points and EUR 429). On the other hand, for individuals under 50 and above 30 the effects on employment are not statistically significant and the effects on earnings are negative (EUR -119), and, for individuals below 30 the effects are strongly negative for both employment and earnings (-3 percentage points and EUR 181). Therefore, even if younger jobseekers are more likely to enrol in the programme, older jobseekers benefit the most from it. Furthermore, in terms of upward occupational mobility individuals 50 and over exhibit a negative effect (-2.5 percentage points). Thus, older jobseekers improve their probability of having a job through SMT participation but while doing so, they move on average into lower quality occupations than those they held prior to participation.

The effects of SMT on the probability of employment do not differ substantially by the education level of jobseekers. However, the effects on the quality of the jobs found both in terms of earnings and upward occupational mobility is negative for individuals with a level of education above upper-secondary (EUR -218 and -3.4 percentage points). SMT allows jobseekers to enrol in formal education and to obtain a degree above upper secondary education. These results suggest that the upskilling generated by SMT has better results in terms of the quality of the job obtained when it allows jobseekers to get their first above upper secondary diploma. Jobseekers who already possess such a diploma seem to be moving down the job ladder following SMT participation.

Finally, regarding the type of municipality of residence, individuals living in rural municipalities seem to enjoy more positive results than those in urban locations in terms of employment, earnings and occupational mobility although the differences are not statistically significant.

Figure 5.3. Estimated effects of self-motivated training, four years after the starting observation point, by jobseeker characteristics

Changes in employment, monthly earnings and the occupational index in percentile rank relative to year zero



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank).
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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5.6. The results of this evaluation complete previous literature on self-motivated training in Finland

The relatively recent introduction of SMT means that studies on its impact on labour market outcomes are scant. This evaluation completes previous literature that was until now mostly descriptive or inconclusive.

Larja and Räisänen (2020[2]) perform a descriptive analysis that details the evolution of the programme and the types of individuals it attracts. They find that SMT are typically long, with an average of 413 days. This is to be expected given the type of training that individuals participate in and its maximum duration of 24 months. This duration does not vary by age. The most common occupational type was unknown (suggesting either recent graduates or immigrants without a Finnish work history), followed by health and care workers. The authors looked at training uptake by labour supply of occupations and found some consistency, with those workers in industries with lower labour shortages more likely to participate in retraining (consistent with searching for better job prospects). However, some industries did not conform to this dynamic. For example, those in restaurants and construction looking to retrain even as there are labour shortages in such industries. This may be explained by the relatively low pay and poor working conditions in those industries, relative to others. (Aho et al., 2018[3]) perform an exercise to match SMT participants to non-participants and are inconclusive in their findings. They find employment outcomes that are higher for individuals starting SMT after one or six months of unemployment, but not for those that start after 12 months of employment. They attribute the larger impact seen for the cohort starting after six months of unemployment to unobserved selection bias.

5.7. Conclusion

SMT presents positive long-term effects on employment. The fact that these effects are smaller than other programmes in the literature can be partly explained by the larger lock-in effects induced by the return to education for a period longer than classical LMT. Expanding the window of observation of this study would plausibly lead to observe higher magnitude effects over the following years. These smaller effects could also come from the smaller labour market policy component of SMT as compared to LMT. Moreover, individuals in the control group could have benefited from other PES services and programmes. However, testing whether the stronger lock-in effects come from differences the design of the programmes goes beyond the scope of this study. More data should be gathered on the length and content of SMT to unveil the mechanisms behind the effects found.

On average, SMT does not positively impact upward mobility. Nevertheless, it does affect the shape of the distribution of occupational quality: from bottom and top occupations towards occupations in the middle of the distribution. This raises the question of what the objective of policy makers should be: designing programmes that improve the quality of jobs on average or programmes that reduce inequalities in job quality leading to a more concentrated distribution of occupations?

SMT effects vary across subgroups of the populations and benefits more women and older individuals while decreasing the quality of jobs for individuals with an above secondary level of education. While women are more likely to participate in SMT than men, SMT participants are on average younger and more educated than the rest of the unemployed. Efforts could be made to encourage the groups of the population that are more likely to benefit from it to increase their participation in SMT.

References

Aho, S. et al. (2018), *Työvoimapalvelujen kohdistuminen ja niihin osallistuvien työllistyminen*. [3]

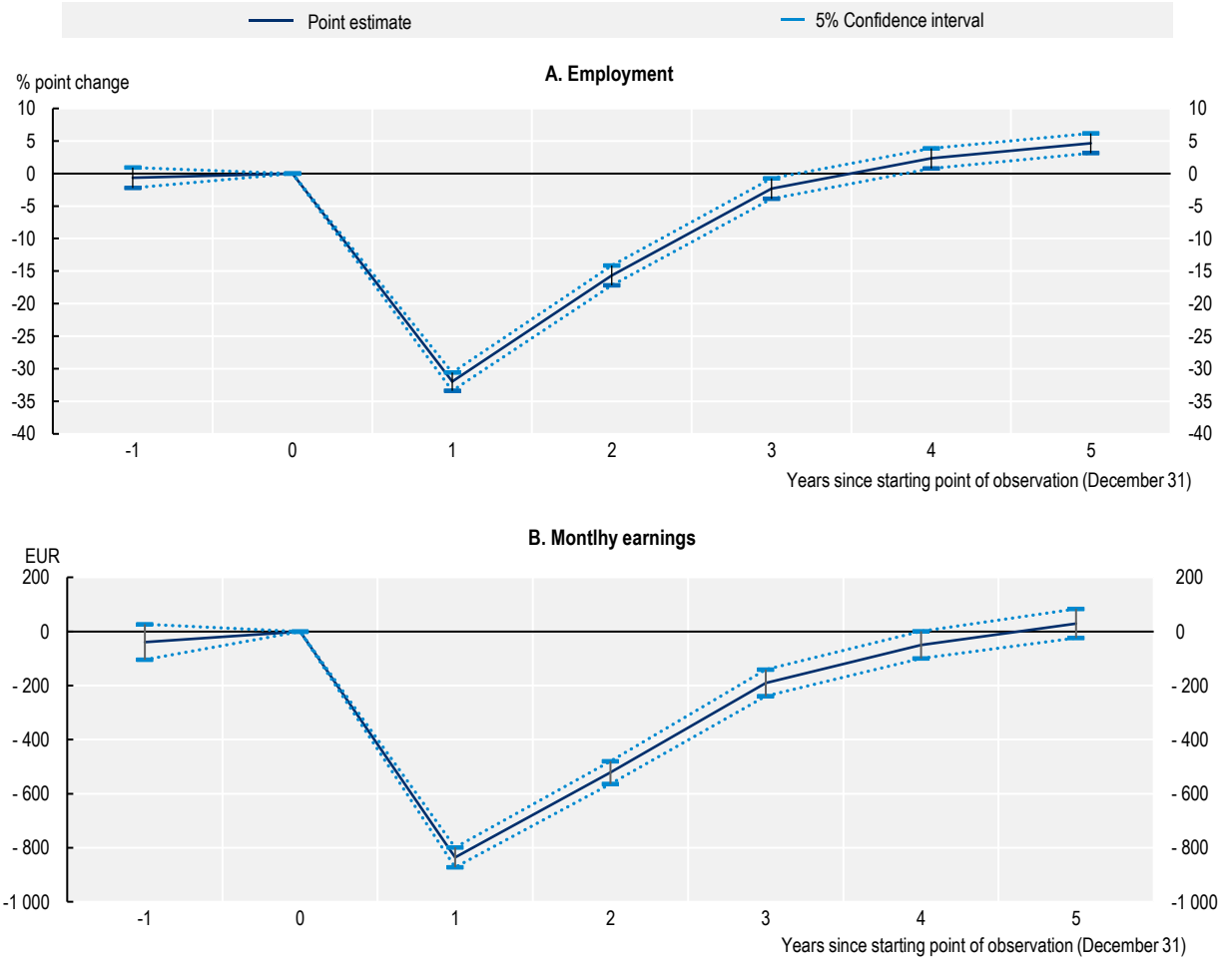
Card, D., J. Kluve and A. Weber (2018), "What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations", *Journal of the European Economic Association*, Vol. 16/3, pp. 894-931, https://doi.org/10.1093/JEEA/JVX028. [1]

Larja, L. and H. Räisänen (2020), *Omaehtoinen opiskelöu työttömyysetuudella.*, TEM-analyyseja 99/2020. [2]

Annex 5.A. Additional figures

Annex Figure 5.A.1. SMT effects increase after an initial lock-in period

Percentage point change in employment probability (Panel A) and change in monthly earnings (Panel B)



Note: The sample is restricted to individuals having an ongoing unemployment spell at the end of years 2012-13.The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, the type of municipality, the type of building, the quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts. Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one (therefore between points zero and one in the graph). Other years are relative to this.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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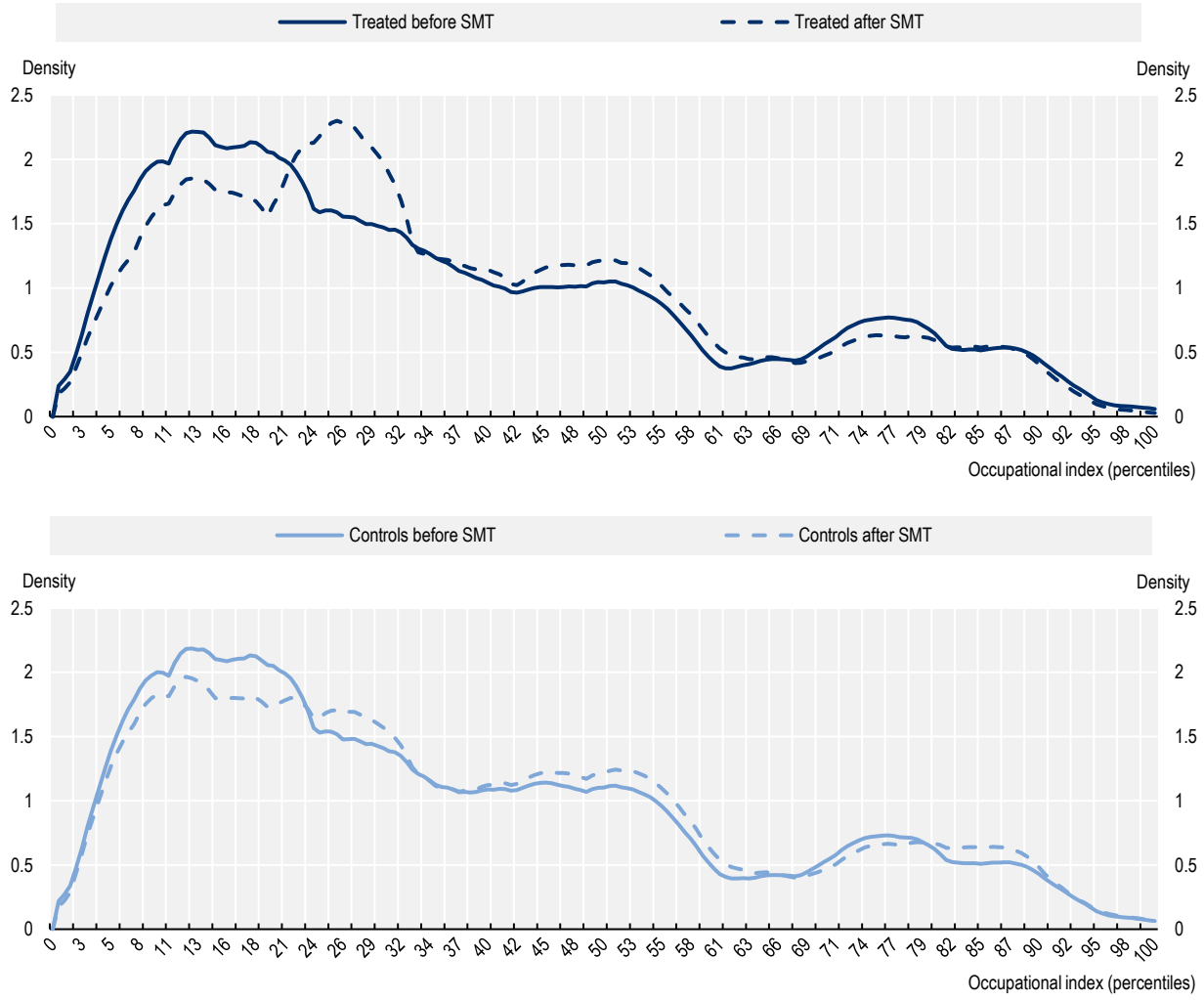
Annex Figure 5.A.2. Effect of self-motivated training along the distribution of the occupational index by treatment status

Occupational index distribution before (year 0) and after (year 4) self-motivated training for treated and control individuals



Note: The heights of the lines indicate the relative share of individuals in occupations whose index in percentiles are on the horizontal axis. This figure compares treatment and control distributions in years 0 (before) and 4 (after).
The two sample Kolmogorov-Smirnov test for equality of the distribution of the occupational index between treated and control groups leads to a p-value of 0.015 before SMT, and of 0.000 after SMT.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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Notes

[1] Note that the control group is identified from the universe of jobseekers in the final sample. The sample was not restricted to jobseekers that did not benefit from any other service as these individuals are likely to have very specific characteristics and not be representative of the population of interest, leading to potential selection issues.

[2] Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one. Other years are relative to this. For example, year four identifies outcomes four years after first observing an individual as unemployed, but three years after having participated in training.

6 Evaluation of labour market training

This chapter measures the effect of labour market training (LMT) on the employment, earnings and occupational mobility of participants. The change induced along the distribution of occupational quality is also explored. To account for the selection of participants into the programme, the counterfactual impact evaluation deploys a propensity score matching methodology. The estimated effects are examined across sub-groups of unemployed (age, gender, education level and urban or rural location) and across different durations of the programme. In the long term, employment of LMT participants rises significantly compared to non-participants, whilst earnings are similar. LMT does not lead, on average, to moves up the occupational ladder. Older individuals and women enjoy the largest gains from participation, and longer labour market trainings have larger effects in the long term for employment and earnings.

6.1. Introduction

This examines Finland's labour market training (LMT) programmes symmetrically to the analysis of self-motivated training (SMT) provided in Chapter 5 of this report. The sample studied consists of jobseekers with an ongoing unemployment spell at the end of years 2012-14. The results are examined from one to four years after this point. The impact evaluation measures the effects for unemployed people that participate in the programme, on a rich set of labour market outcomes, relative to similar jobseekers who did not participate in LMT but could have benefited from other PES services and programmes.[1] In addition to measuring the impact of the programme on employment probability and earned income, the analysis examines the effects of labour market training on occupational mobility. The estimated effects are measured across sub-groups of jobseekers based on their age, gender, education level and urban or rural location. In the main results, labour market training programmes are restricted to those that last at least three months; this chapter explores the extent to which effects vary when different durations of labour market training programmes are considered. It then links the results found to previous literature on LMT. The chapter ends with a conclusion section.

6.2. Labour market training participants are compared to a control group obtained through propensity score matching

Jobseekers that participate in LMT differ from the rest of the unemployed (Table 6.1, columns 1 and 2). LMT participants are more likely to be men (+4 percentage points), foreign nationals (+4 percentage points) and single (+6 percentage points). They are on average 4.6 years younger than other jobseekers and have more children. Individuals that enrol in LMT are more likely to live in urban municipalities (+6 percentage points) and in blocks of flats (+8 percentage points). LMT participants are less likely to have a level of education below upper-secondary (-3 percentage points) but are also less likely to speak the Finnish language (-6 percentage points). Regarding the fields of study, degrees in health and welfare are underrepresented (-4 percentage points) while information and communication technology degrees are overrepresented (+4 percentage points) among LMT beneficiaries. However, there is not a sizeable difference in terms of professions in the last job held. Finally, the number of days spent in unemployment over the past (two) year(s) is slightly higher for LMT participants. Participants and non-participants in LMT are thus not directly comparable. A control group of jobseekers similar to participants along observable characteristics, built through propensity score matching, is used to account for these differences (Table 6.1, column 3 for the control group and column for the treated group).

Individuals that enrol in LMT are also considerably different from SMT beneficiaries (columns 1 and 4 of Table 6.1). SMT attracts more women. In fact, the share of women participating on it is around 20 percentage points higher than in LMT. SMT participants are on average two years younger, have more children and are more likely to be the spouse of the family (+8 percentage points). On the other hand, LMT participants are more likely to be foreign nationals (+4 percentage points) and less likely to speak the Finnish language (-5 percentage points). Compared to SMT beneficiaries, LMT participants are less likely to hold a general programme degree (-5 percentage points), a degree in arts and humanities (-4 percentage points), or in health and welfare (-5 percentage points) but are more likely to hold a degree in engineering (+14 percentage points). Regarding professions, they are less likely to belong to the service and sales industry (-8 percentage points) and more likely to have experience in elementary occupations (+9 percentage points). On average SMT participants have spent less time in unemployment over the past (two) year(s) than LMT participants (around 20 days less over the past two years).

Since participants in SMT and in LMT are intrinsically different, the result of Chapters 5 and 6 are not directly comparable. In fact, it is impossible to disentangle at what point the differences encountered come from differences in the effectiveness of the programmes or from the fact that different people select into each programme.

Table 6.1. Participants and non-participants in labour market training differ considerably

Comparison of observable characteristics by treatment status

	Mean for participants in LMT (treated)	Mean for non-participants in LMT (unmatched)	Mean for control individuals (matched)	Participants in SMT (Chapter 5)
History in unemployment				
Unemployment duration until 31 December (in the current spell)	208.87	274.48 (***)	202.04 (***)	180.66
Number of unemployment spells in previous year	1.10	1.21 (***)	1.10	1.13
Number of days in unemployment in previous year	91.94	89.19 (***)	91.93	84.44
Number of unemployment spells in previous 2 years	1.83	2.02 (***)	1.82	1.87
Number of days in unemployment in previous 2 years	180.21	178.70	180.42	161.45
Demographic characteristics				
Finnish national	0.93	0.97 (***)	0.94 (*)	0.97
Woman	0.39	0.43 (***)	0.39	0.58
Age	38.48	43.12 (***)	38.15 (**)	36.36
Number of children	0.85	0.69 (***)	0.85	1.01
Car ownership	0.56	0.57 (***)	0.57	0.49
Marital status				
Unmarried	0.51	0.45 (***)	0.52	0.51
Married	0.35	0.38 (***)	0.35	0.37
Divorced	0.14	0.16 (***)	0.13	0.13
Widowed	0.01	0.01 (***)	0.01	0.01
Status in the family				
Not belonging to a family	0.31	0.31	0.31	0.27
Head of the family	0.26	0.25 (***)	0.26	0.23
Spouse	0.14	0.17 (***)	0.14	0.22
Child	0.07	0.06 (***)	0.07 (*)	0.04
Head of cohabiting family	0.13	0.11 (***)	0.13	0.10
Spouse of cohabiting family	0.08	0.09 (***)	0.08	0.13
Unknown	0.02	0.02	0.01	0.01
Type of housing				
Detached house	0.34	0.42 (***)	0.34	0.36
Terraced house	0.14	0.13 (**)	0.14	0.15
Block of flats	0.49	0.41 (***)	0.49	0.46
Other building	0.02	0.02	0.02	0.02
Living alone	0.27	0.27	0.27	0.23
Municipality type				
Urban	0.76	0.70 (***)	0.76	0.75
Semi urban	0.13	0.16 (***)	0.13	0.14
Rural	0.11	0.15 (***)	0.11	0.11
Language				
Finnish	0.85	0.91 (***)	0.85	0.90
Swedish	0.02	0.03 (***)	0.02	0.02
Other	0.14	0.07 (***)	0.13	0.08
Level of education				
Upper secondary or less	0.52	0.55 (***)	0.52	0.54
Post-secondary non tertiary education	0.01	0.01	0.01	0.01
Short cycle tertiary education	0.08	0.08	0.09	0.08
Bachelors or equivalent	0.11	0.10 (***)	0.11	0.12
Masters or equivalent	0.09	0.07 (***)	0.09	0.07
Doctoral or equivalent	0.01	0.01 (***)	0.01	0.01
Unknown	0.19	0.19 (**)	0.18 (**)	0.17

	Mean for participants in LMT (treated)	Mean for non-participants in LMT (unmatched)	Mean for control individuals (matched)	Participants in SMT (Chapter 5)
Field of education				
General programmes	0.04	0.05 (***)	0.04	0.09
Education (Teacher training and education science)	0.01	0.01 (***)	0.00	0.01
Arts and humanities	0.05	0.06 (**)	0.05	0.09
Social sciences	0.01	0.01 (*)	0.01	0.01
Business	0.14	0.12 (***)	0.14	0.14
Natural sciences	0.01	0.01 (***)	0.01	0.02
ICT	0.07	0.03 (***)	0.06	0.05
Engineering	0.32	0.31 (***)	0.33	0.18
Agriculture	0.02	0.03 (***)	0.03	0.03
Health and welfare	0.03	0.07 (***)	0.03	0.08
Services	0.10	0.11 (***)	0.10	0.13
Unknown	0.20	0.20	0.19 (**)	0.18
Profession of previous occupation				
Armed forces	0.00	0.00	0.00	0.00
Managers	0.01	0.02 (***)	0.01	0.01
Professionals	0.12	0.11 (***)	0.11	0.13
Clerical support	0.07	0.06 (***)	0.08	0.08
Service and sales	0.20	0.22 (***)	0.20	0.29
Skilled agricultural, forestry and fishery	0.02	0.02 (**)	0.01	0.02
Craft and related trades	0.21	0.21 (**	0.20	0.12
Operators and assemblers	0.11	0.12 (***)	0.11	0.09
Elementary occupations	0.15	0.13 (***)	0.15	0.12
Number of observations	**16 489**	**354 249**	**15 674**	**13 766**

LMT: Labour Market Training, SMT: Self-motivated training.
Note:*, ** and *** represent a p-value bellow 0.1; 0.05; and 0.01, respectively. They are displayed for the T-test on the differences between columns 2 and 1 and between columns 3 and 1. Unmatched refers to all unemployed individuals in the sample that do not participate in LMT while matched refers to the individuals identified as comparable to the participants in LMT through nearest-neighbour propensity score matching. The last column indicates the average characteristics of jobseekers that participate in SMT taken from Chapter 5 (Column 1 of Table 5.1). This table includes individuals unemployed 31 December 2012, 2013 and 2014 for whom we observe the outcomes of interest (employment status, earnings and occupation) the year before and the four following years.
Within fields of education, general programmes include: basic general programmes (pre-primary, elementary, primary, secondary, etc.); simple and functional literacy and numeracy; and personal development.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/2pdrg5

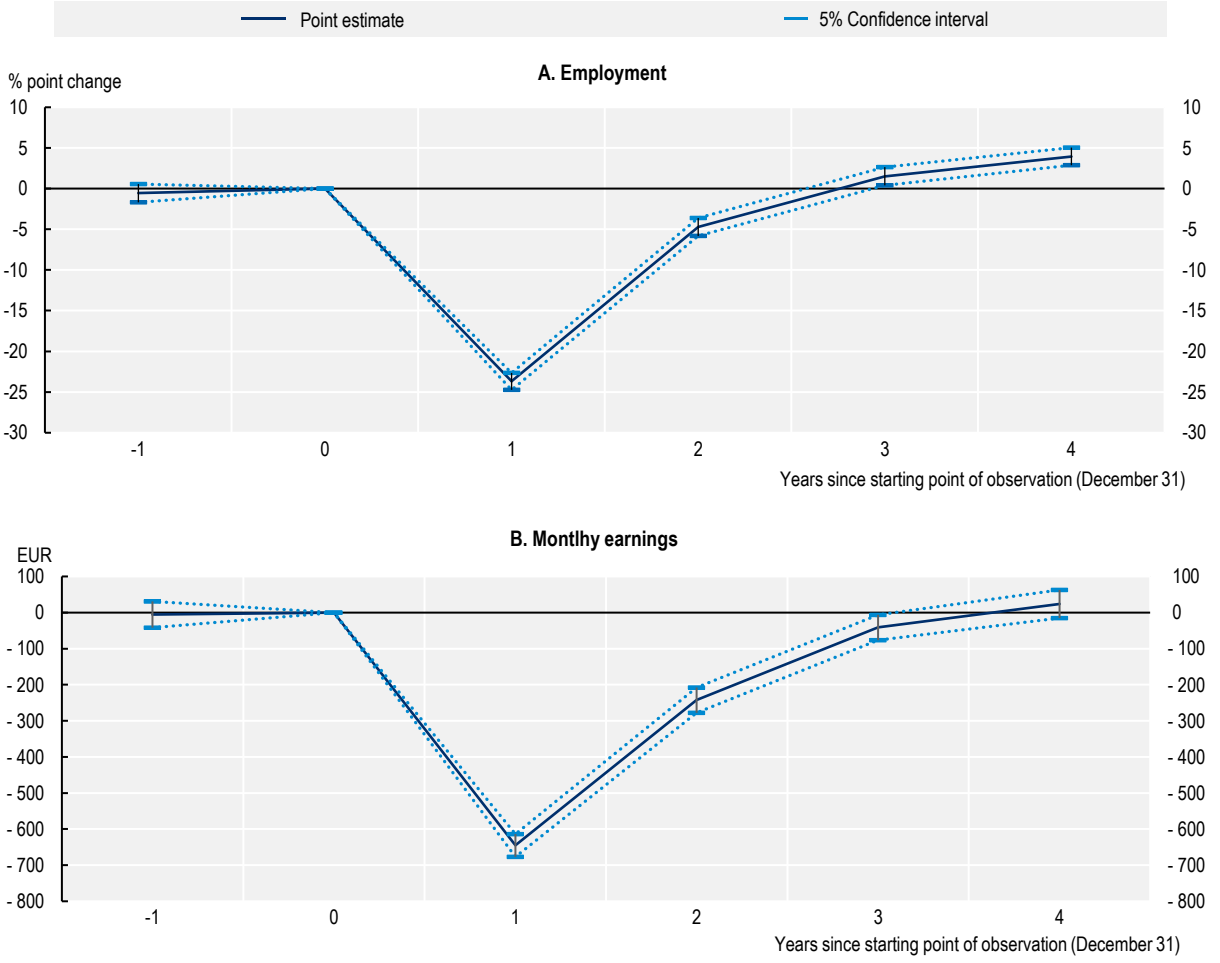
6.3. Labour market training has positive effects on the likelihood of being employed in the long term

The estimation results show that LMT has a significant lock-in effect on employment at the end of the year the programme starts (recall that this corresponds more precisely to 31 December of the year the programme takes place[2]) (Figure 6.1, Panel A). At this point, treated individuals are around 24 percentage points less likely to be employed than similar jobseekers in the control group. However, this lock-in effect is considerably diminished the following year (less than -4 percentage points) and two years after the start of the programme (three years from the starting point of observation) the impact of LMT on the employment probability becomes positive and significant. In terms of monthly earnings, LMT has a lock-in effect that lasts longer than its lock-in effect on employment (Figure 6.1, Panel B). Treated individuals have lower earnings than their control counterparts until two years after the start of the programme. Four years after

the starting point of observation treated individuals catch-up, they have on average the same monthly earnings as jobseekers in the control group.

Figure 6.1. Labour market training has lock-in effects in the short term and positive employment effects in the long term

Percentage point change in employment probability (Panel A) and change in monthly earnings (Panel B)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts. Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one (therefore between points zero and one in the graph). Other years are relative to this.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/cuwvf5

It is not possible to disentangle to what extent the shorter lock-in effect of LMT as compared to SMT comes from differences in the efficiency of the programmes or from differences in their participants' characteristics, however, at least part of it comes mechanically from the fact that LMT have shorter duration than SMT. Participants in LMT are kept out from job search for a shorter amount of time and can accept jobs faster than jobseekers participating in SMT.

The median of the estimates on the probability of being employed, found by other studies in the international literature at a similar time horizon, is of 5 percentage points (ranging from -2 to 25 percentage points) (Card, Kluve and Weber, 2018[1]). The effect found for LMT is consistent with these findings. Three years after the start of the programme participants in LMT are around 4 percentage points more likely to be employed (with a 95% confidence interval ranging from around 3 to 5 percentage points). Furthermore, running the same estimation on a smaller sample of unemployed for whom employment and earnings can be observed over one more year, leads to larger effects for both outcomes after four years than after three years from the start of the programme (Annex Figure 6.A.1).

6.4. Labour market training has no average effects on upward occupational mobility but shifts the distribution of occupational quality

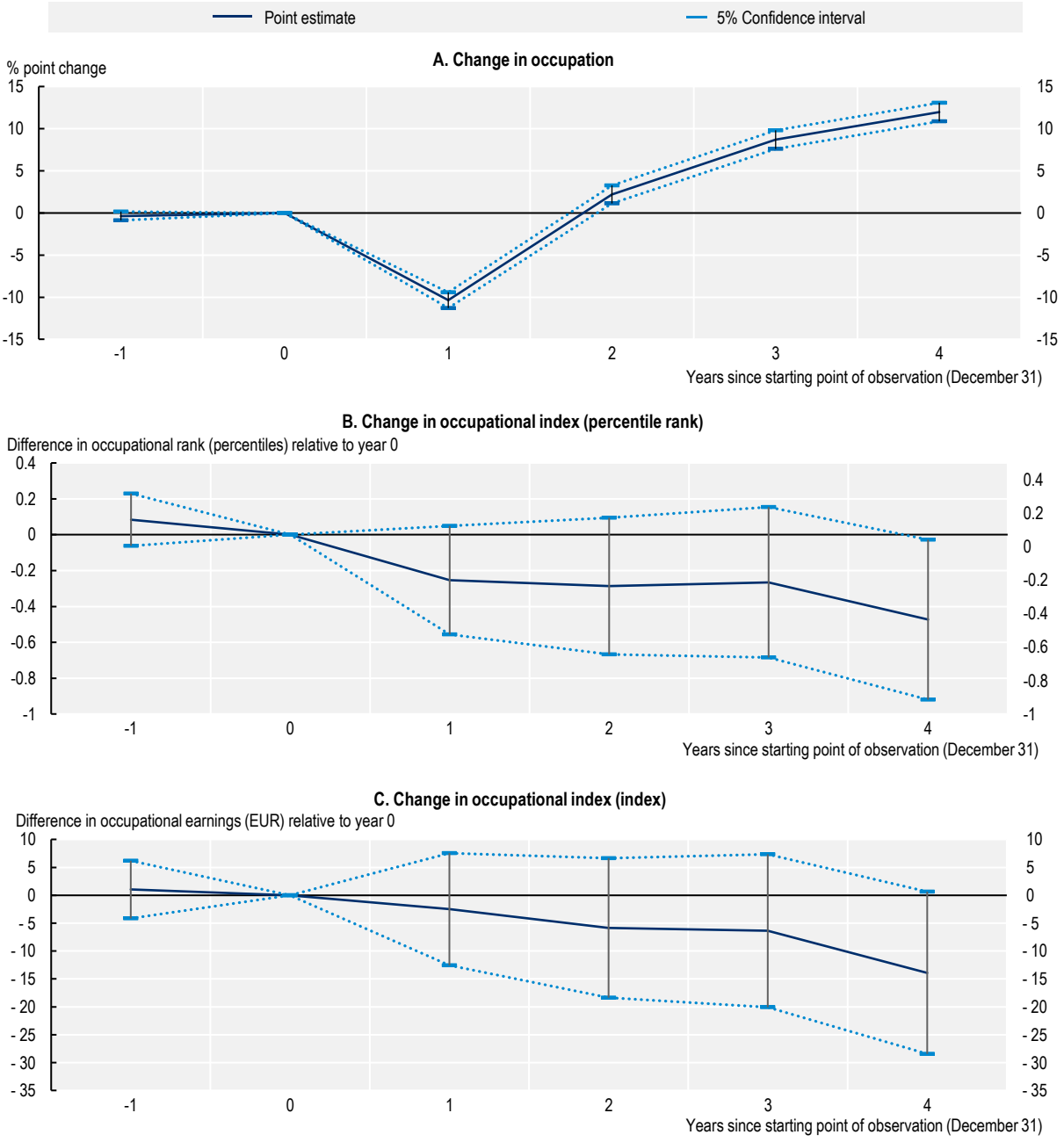
In addition to employment outcomes and earnings, this analysis investigates whether LMT participants are more likely to change occupations and, if by doing so, they move up or down the jobs ladder. As explained in Chapter 4, the quality of occupations is measured by an occupational index that builds on Finnish data on earnings at the occupation level from 2010 to 2018. It measures quality both as a percentile rank and in monetary units (occupational earnings in euros).

The impact of LMT on the probability of changing occupation is positive and significant as of one year after the start of the programme (Figure 6.2, Panel A). After this point the positive impact increases steadily in magnitude and, four years after the starting observation point, LMT participants (that is treated individuals) are 12 percentage points more likely to have a different occupation than the one they had before the start of the programme as compared to non-participants (jobseekers in the control group). Nevertheless, even if LMT participants are more likely to move along the occupational ladder, their upward occupational mobility is not affected. The change in the occupational index before and after labour market training is not significantly different for LMT participants than for their counterparts (Figure 6.2, Panels B and C).

This null average effect on upward occupational mobility does not give information on how LMT affected the shape of the distribution of occupations. This null effect could come from an absence of change along the distribution, but different tails of the distribution could also be disproportionately affected. To explore the distributional effect of LMT, Annex Figure 6.A.2 plots the distribution of the occupational index (in percentiles) of LMT participants and non-participants respectively, at the starting point of observation (before LMT participation) and four years after this point (three years after LMT starts). The change in the distribution of the occupational index of LMT participants does not follow the same pattern than for non-participants. While only minor changes are observed in the distribution of the occupational index between the starting point of observation and four years after this point for the non-participants, the distribution of LMT participants has considerably changed. Notably two bumps appear in the low-middle (around percentiles 20 to 32) and the middle of the distribution (around percentiles 40 to 53) while occupations below the 20th percentile and between the 60th and the 80th are less represented. Therefore, the null average effect on upward occupational mobility hides a shift towards specific occupations in the middle of the distribution for individuals that participated in LMT as compared to similar individuals that did not participate in it.

Figure 6.2. Labour market training increases the chances of changing occupation and has no effects on upward occupational mobility

Change in the probability of changing occupation (Panel A), change in the occupational index in percentile rank relative to year 0 (Panel B) and change in the occupational index in earnings units relative to year 0 (Panel C)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/8tknhq

6.5. The effects of labour market training vary across sub-groups of unemployed people and according to its duration

Analogous to the analysis of SMT in Chapter 5, Section 5.4, this section provides separate estimates for the results along several jobseeker's characteristics: (i) gender, (ii) age, (iii) level of education and (vi) urban vs. rural municipality of residence. Furthermore, this section also provides separate estimates based on the duration of LMT. The results presented in the previous sections have documented the effects of LMT programmes that lasted at least three months (Sections 6.3 and 6.4). The aim of this restriction is to avoid the results to be driven by short-term LMTs present in the data that are unlikely to have real up-skilling effects. This section explores how the results change if this restriction is relaxed in order to include all LMTs observed in the data, but also how the results change with a stronger restriction that keeps only trainings that last more than six months.

6.5.1. Women and older individuals benefit more from labour market training

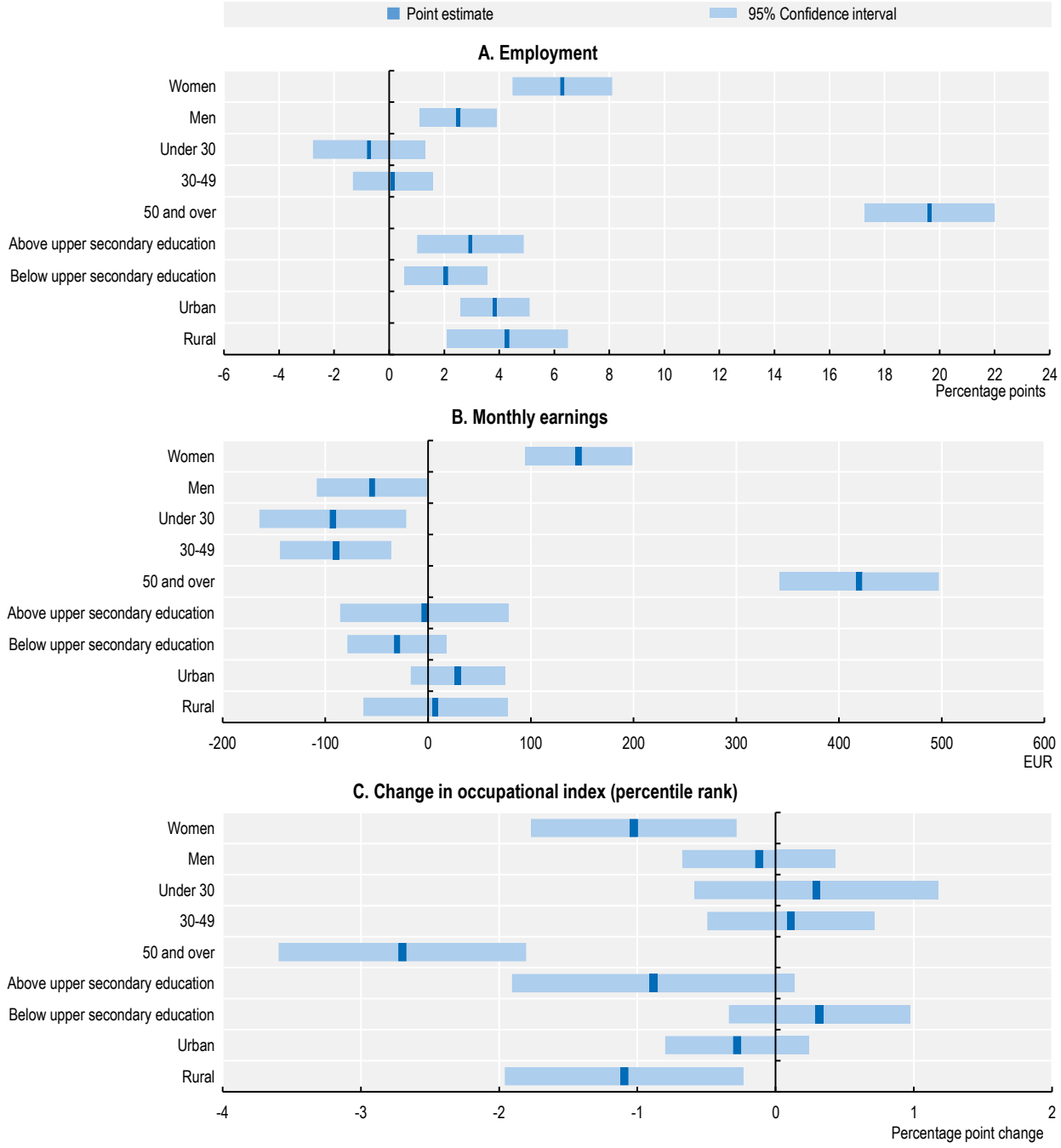
All subgroups of jobseekers, except for individuals under 49 years of age, exhibit positive and statistically significant effects of LMT on the probability of being employed four years after the starting observation point (Figure 6.3, Panel A). Individuals aged 50 and over are the subgroup with the largest effects on employment probability (around 19 percentage points). This gap on the impact of LMT across age groups holds also for monthly earnings: individuals under 30 present the smallest effect of all groups (EUR -93) while individuals 50 and above are those most positively impacted (EUR +420) (Figure 6.3, Panel B). Regarding upward occupational mobility, despite their positive employment outcomes, older jobseekers seem to be moving down the jobs ladder (-2.7 percentage points) (Figure 6.3, Panel C). Thus, similar to SMT, age seems to be a key driver of heterogeneity in the effectiveness of LMT.

The results on gender also parallel the ones for SMT and add up to the suggestive evidence that training programmes may be more effective for women than men (Card, Kluve and Weber, 2018[1]). Even if men are more likely to participate in LMT than women (Section 6.2), the impact of the programme is higher for women than for men in terms of employment probability (6.2 against 2.5 percentage points) and monthly earnings (EUR +146 against EUR -55). The opposite is true for upward occupational mobility; women seem to be moving down the jobs ladder (-1 percentage point) while there is no statically significant effect for men.

The effects of LMT on the probability of employment, earnings and upward occupational mobility do not differ substantially by the education level of jobseekers and the type of municipality of residence.

Figure 6.3. Estimated effects of labour market training, four years after the starting observation point, by jobseeker characteristics

Percentage point change in employment (Panel A), change in monthly earnings (Panel B) and change in the occupational index in percentile rank relative to year 0 (Panel C)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank).
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/rx9p32

6.5.2. Longer labour market trainings exhibit better results on employment and earnings in the long term

LMT is open to all individuals registered as unemployed. Jobseekers can enrol in the LMT course they select after the TE Office reviews if it suits well their profile (Chapter 4, Section 4.3). LMT aim at upskilling jobseekers and improve their employability; however, LMT is not uniform. A large variety of courses are proposed, with different contents, targeting different professions and having different durations. Investigating which of these features make LMT more effective can inform policy making on what works and give insight on how to redesign trainings to improve their effectiveness. Nevertheless, the data gathered for this study does not contain information on the contents, the type or the target occupation of trainings, it contains only reliable information on the duration of LMT. While the main results presented in this chapter focus on trainings that lasted more than three months, the subsequent analysis explores how the results change by modifying this restriction.

When short LMTs are not excluded, and thus LMTs of all durations are included in the analysis, the estimation results exhibit a lock-in effect smaller in magnitude (Figure 6.4). At the end of the year the programme starts, LMT participants are 16.5 percentage points less likely to be employed and earn EUR 484 less than controls while in the main specification this numbers rise to almost -24 percentage points and EUR -645. The opposite is true when we restrict the analysis to LMTs that last at least six months. When only long duration trainings are considered, the participants are around 30 percentage points less likely to be employed at the end of the year that follows the start of LMT and earn EUR 790 than similar jobseekers who do not participate in this type of training.

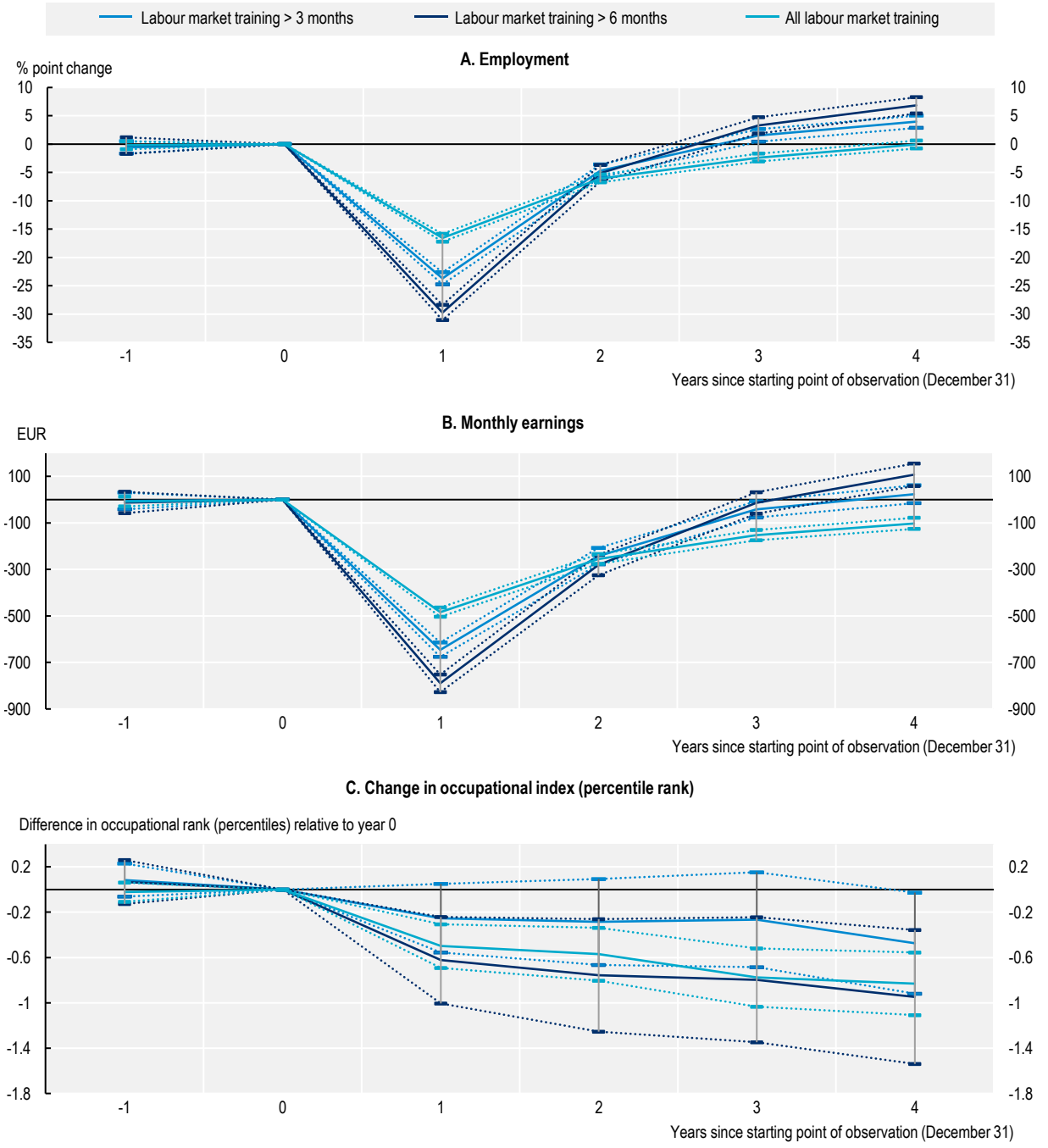
One year after the start of LMT, there is no statistically significant difference on the impacts on employment and earnings across the three different samples. However, two years after the start of the training, the more the sample is restricted to longer duration trainings the more positive the results are in terms of employment and earnings. At the last observation point of the study, LMT that last at least six months make their beneficiaries almost 7 percentage points more likely to be employed and earn around EUR 107 more per month. These numbers decrease to 4 percentage points and EUR 24 when trainings that last between three and six months are also included. Finally, when no restriction is made on duration the effects for employment are null and of EUR -102 for earnings.

The effects of LMT on upward occupational mobility do not differ substantially with the duration of the programme.

Altogether, these results suggest that longer LMTs generate stronger lock-in effects but also lead to better outcomes afterwards. Longer trainings may allow more upskilling than shorter ones steering greater improvements on employability.

Figure 6.4. Labour market training effects vary with its duration

Percentage point change in employment (Panel A), change in monthly earnings (Panel B) and change in the occupational index in percentile rank relative to year 0 (Panel C)



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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6.6. The results found are coherent with existing research on labour market training in Finland

Several previous studies have reviewed LMT and have found beneficial effects that are coherent with the results found in this evaluation. These studies usually use matching as the statistical technique to identify programme impacts. This allows evaluation to be completed post hoc, whilst the programme is in live running and relies on comparing programme participants to non-participants that are similar to them across a range of observable characteristics. The most recent study of its effects found that it raised employment rates by 5 to 10 percentage points and increased annual earnings by around EUR 2 500 (Alasalmi et al., 2022[2]). Positive effects on employment emerged one to two years after participation, as lock-in effects (whereby participation in training means people delay looking for jobs) attenuated. These outputs persist over the longer term and are still present ten years following participation. The study also presents evidence that outcomes are fairly stable over time, suggesting that the benefits to participation have remained consistent over different parts of the economic cycle. This gives some reassurance when evaluating long-term effects, for which one needs to assess training that started some 15 years previously. As impacts are consistent at shorter durations there is more confidence that long-term effects might also persist for training courses that are undertaken more recently.

Alasalmi et al. (2022[2]) also assess outcomes by individual status prior to participation. Jobseekers who were unemployed prior to their job search experience positive employment rate impacts of 8-10 percentage points. Effects are similar for those that are employed prior to their participation. Those individuals made redundant prior to training experience a 5 percentage points increase to employment rates. For those outside of the labour force, employment effects are around 10 percentage points. Matching is used to construct two different comparison groups to participants. One group is of all eligible non-participants, and another is comprised of those that applied but were not successful.[3] This is done to compare whether the choice of group of non-participants influences the overall programme estimate. The choice of control group does influence effect sizes. The comparison to all eligible non-participants yields a larger effect size than when comparing to non-participants who had applied for training (the former having roughly a 3 percentage points higher impact). Employment impact effect sizes are also analysed by the type of LMT. Re-training courses have the largest impact (8-10 percentage points), followed by initial vocational training (7-9 percentage points), further training (5-8 percentage points) and then entrepreneurship and other training (4-7 percentage points). These differences are not as pronounced when income is the outcome variable being evaluated.

Aho et al. (2018[3]) examine a cohort of 2010 LMT participants and find an employment rate impact of around 10 percentage points with highest effects for jobseekers over the age of 50. Alasalmi et al. (2019[4]) similarly find positive effects for LMT, commencing around 1-2 years after participation, with no differences across age and gender groups in the longer term. However, they do find that training seems to benefit older (55-64 years old) workers in the shorter term too, a feature that does not occur for younger age groups. They also find larger income effects for these older workers, though note that small sample sizes mean there is a high degree of uncertainty around the estimates. These results are further corroborated when looking at LMT back as far as the early 1990s, with positive impacts detected for jobseekers participating in training, which were similar even when observed at different points in the economic cycle (Hämäläinen, 1999[5]). Using data from a similar period (1989-98), Tuomala (2002[6]) finds LMT raises employment by around 6.5 percentage points on average and the effect is higher for those with higher levels of previous employment (3.9 percentage points for those with basic education compared to 7.9 percentage points for those with secondary and higher education).

Taken together there is consistent evidence across a range of studies including this one, that LMT offers positive impacts across both the probability of employment and, to a lesser but still positive extent, the income from that employment. Variation has been found within different sub-groups suggesting that analysis which considers different types of individuals is beneficial to explaining a rich story of LMT impacts. It also gives pause for thought to policy makers in exploring how to improve the LMT offering. Particularly on whether to encourage

participation among sub-groups or how to alter training content to improve outcomes for some groups. The results of this study encompass previous findings and broaden them to analyse the impact of LMT on occupational mobility. LMT increases mobility across occupations but does not lead to highly paid occupations.

6.7. Conclusion

LMT exhibits positive long-term effects on employment that are in line with national and international evidence. Expanding the window of observation of this study would plausibly lead to observe higher magnitude effects in terms of employment and earnings over the following years. LMT does not affect upward mobility on average. However, it does affect the shape of the distribution of occupational quality decreasing the frequency of bottom and top occupations in favour of occupations in the middle of the distribution. This raises the question of what the objective of policy makers should be: designing programmes that improve the quality of jobs on average or programmes that reduce inequalities in job quality leading to a more concentrated distribution of occupational quality.

LMT effects vary across subgroups of the populations and benefits more women and older individuals. LMT participants are on average younger and more likely to be male than the rest of the unemployed. Therefore, efforts could be made to encourage these two groups of the population to increase their participation in LMT, as they are more likely to benefit from it. Furthermore, longer LMTs generate larger gains in terms of employment and earnings, pointing to the importance of training that provides perspectives, a structured rhythm and allow the acquisition of more and better skills. To better understand the mechanisms behind the effects found, collecting data on different features of LMT such as the contents, the skills or the occupations targeted by trainings could help complete this analysis. Data on the occupations targeted could be, for instance, linked with the occupational barometer data (see Box 2.1 in Chapter 2) to shed light on whether LMT leads to better results and helps reducing occupational mismatch when it is targeted to occupations identified as being in high demand. Moreover, a cost-benefit analysis could complete this evaluation by studying whether the positive effects of these programmes are sufficient to offset their cost.

References

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Hämäläinen, K. (1999), *Aktiivinen työvoimapolitiikka ja työllistyminen avoimille työmarkkinoille.*, ETLA Sarja B 151. [5]

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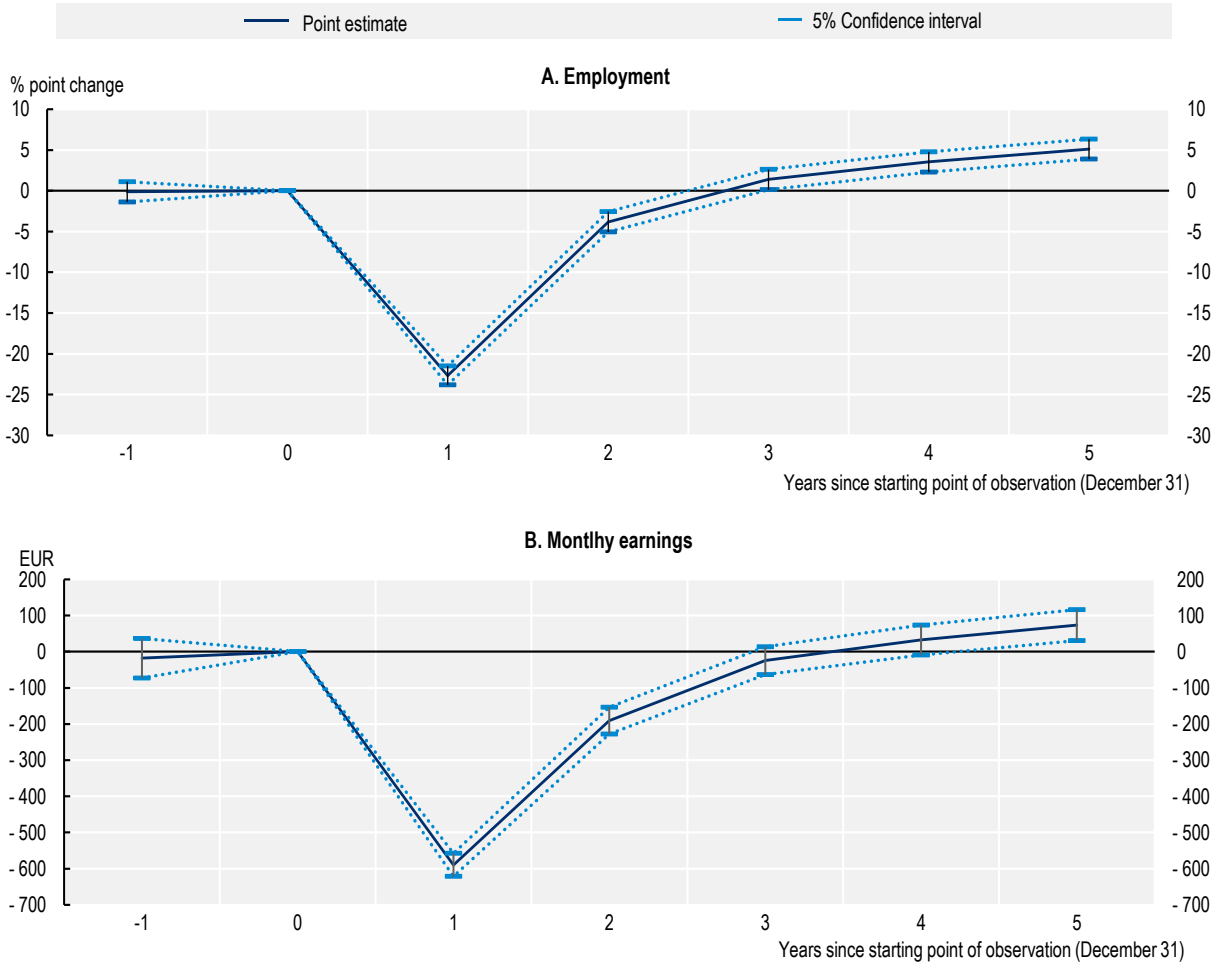
Annex 6.A. Additional figures

Annex Figure 6.A.1. LMT exhibits higher effects over the longer run

Percentage point change in employment probability (Panel A) and change in monthly earnings (Panel B)

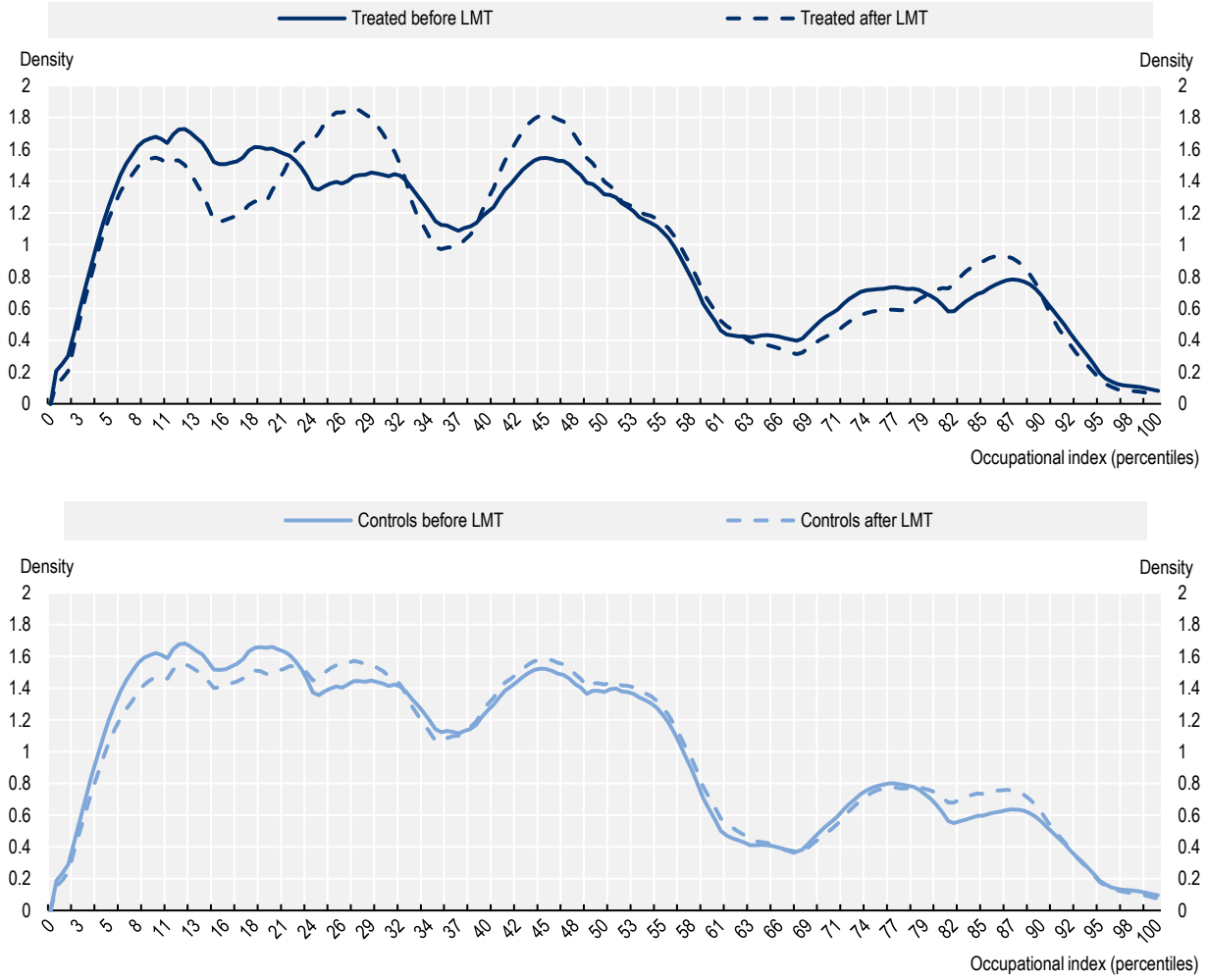


Note: The sample is restricted to individuals having an ongoing unemployment spell at the end of years 2012-13. The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish national, type of municipality, type of building, quarter of registration into unemployment (time trend), as well as previous year employment status, earnings and occupational quality (rank). The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts. Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one (therefore between points zero and one in the graph). Other years are relative to this.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

StatLink https://stat.link/yq785f

Annex Figure 6.A.2. Effect of labour market training in the distribution of the occupational index by treatment status

Occupational index distribution before (year 0) and after (year 4) labour market training for treated and control individuals



Note: The heights of the lines indicate the relative share of individuals in occupations whose index in percentiles are on the horizontal axis. This figure compares treatment and control distributions in years 0 (before) and 4 (after).
The two sample Kolmogorov-Smirnov test for equality of the distribution of the occupational between treated and control groups leads to a p-value of 0.070 before LMT and of 0.000 after LMT.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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Notes

[1] Note that the control group is identified from the universe of jobseekers in the final sample. The sample was not restricted to jobseekers that did not benefit from any other service as these individuals are likely to have very specific characteristics and not be representative of the population of interest, leading to potential selection issues.

[2] Outcomes are observed at the end of each calendar year (31 December). Year zero is the first year in the sample and identifies the pool of people that are unemployed at the end of that year. All training takes place in year one. Other years are relative to this. For example, year four identifies outcomes four years after first observing an individual as unemployed, but three years after having participated in training.

[3] Note that data on applications were not available for this study.

7 Interactions between training programmes

The broad question when considering training is whether and how it influences skill development and acquisition to connect people better to jobs. Labour market training (LMT) and self-motivated training (SMT) are designed to achieve this objective with very different underlying training offers. With the introduction of SMT in 2010, better financial support became available to acquire degree level education. This raises the question of how its introduction affected jobseekers' outcomes as a whole. Does SMT replace LMT for some individuals? Does it complement the training that LMT provides? This chapter addresses these questions by evaluating the impact that SMT has had on the mix and availability of training to jobseekers.

7.1. Introduction

The analysis in the preceding chapters has evaluated whether self-motivated training (SMT) and labour market training (LMT) are effective in improving jobseekers' labour market outcomes when considered separately. However, a supplementary question is how the introduction of SMT financing has altered the training landscape in Finland and interacted with LMT. It is now easier for jobseekers to undertake two distinctly different types of training provision, as SMT provides greater financial assistance for degree education for jobseekers than was previously the case. SMT tends to be longer and more academically focussed. LMT has more of an emphasis on vocational courses, which are shorter in duration. There is a small difference in their eligibility criteria, with SMT restricted to individuals aged 25 or older.

What does this mean for the totality of the training provision made available by the Ministry of Economic Affairs and Employment (TEM)? Has the introduction of this additional funding for degree education for jobseekers caused overall outcomes to improve, or has it simply displaced individuals from one type of training to another without leading to any change in outcomes? Has the expansion of training funding provision caused different individuals to participate than might have otherwise been the case? Is training complementary, so that the participation in one programme (LMT, SMT or even the study subsidy (SS) from the Social Insurance Institution (KELA)) improves the outcomes experienced in another?

These are important questions for TEM to consider when considering the optimal mix of training provision for its customers. At present, TEM is only able to influence the amount and content of training provided through LMT. Even for LMT, the planning and procurement for training is delivered by the economic and employment (TE) Offices and the ELY centres and part of LMT funding is provided by the Ministry of Education and Culture via the system of central government transfers to local government. SMT was introduced as a means to complete further education and requires no direction from TEM, except via job counsellor agreement that education would fill an educational gap that would help the individual progress in the labour market. This means that currently TEM has no ability to directly influence the use of this training pathway. Consideration of the extent of autonomy that TEM has to influence training for jobseekers, which formulating policy and legislation, is important in ensuring that jobseekers get the right training.

To address some of the questions above, the report considers the following distinct analytical questions.

1. How has the introduction of SMT financing affected the aggregate outcomes for jobseekers at TEM?
2. Has the increased financial contribution of SMT improved educational attainment and therefore outcomes relative to education financed using the SS from KELA?

The chapter proceeds to address these questions in turn, using administrative data on participation in training and on labour market outcomes to determine what effect the introduction of SMT funding has had. In the first section, the first cohort of individuals that had both SMT, SS and LMT available to them are compared to their previous cohort for whom only LMT and SS were available. Section 7.3 compares SMT participants to similar SS participants, to determine whether SMT offers better outcomes in the labour market.

7.2. Have aggregate outcomes for training participants changed after the introduction of self-motivated training?

SMT introduced two mechanisms by which outcomes for training participants might change. Outcomes for the same individual may be better or worse with different training provision. Compositional differences might also occur, with different types of individuals undertaking training or different types of training. In this

case one might expect the introduction of additional financial support for training to expand the number of participants in training, rather than reduce it, but both outcomes are possible.

To attempt an answer to this question, this section looks at outcomes for two different cohorts of jobseekers. These are individuals which were unemployed at the end of either 2008 and 2009 and who participated in either LMT or SMT (via some interaction with TEM) or SS in the following year. Those unemployed in 2008 undertook LMT or SS in 2009, the last year for which only the two were available. Those unemployed in 2009 undertook either LMT, SS or SMT in 2010, when the three different programmes were available. Outcomes for these two cohorts are compared, to determine whether for jobseekers on average, outcomes changed when the suite of available training provision changed.

The timing of the introduction of SMT, shortly after the global financial crisis, means that comparisons are made during a period of labour market flux. Unemployment in 2009 had risen to 8.3%, a 1.9 percentage point increase from 2008. Whilst unemployment remained relatively constant into 2010 (at 8.5%), this period of elevated unemployment and labour market flux in the shorter term means that analysis is potentially complicated by these changes. For example, whilst aggregate unemployment rates remained similar in those two years, the composition of unemployed people changed significantly, with rates of long-term unemployment (12 months plus) increasing significantly in 2010, relative to 2009. Whilst training programmes have been shown to be effective during labour market contractions (Card, Kluve and Weber, 2018[1]), it does mean that comparisons between 2009 and 2010 are being made on across potentially different cohorts of individuals.

The investigation in this chapter relies on comparing cohorts across time periods, which limits the ability to scrutinise different years of training cohorts. Ideally there would be cross-sectional variation in training provision, so that at the same point in time, individuals could be compared under the two different regimes. If this were the case, then the impact of training could be estimated, absent of any effects solely related to time (for example, if the economic cycle impacts upon rates of job finding). However, because SMT was rolled out nationally in 2010, there is no cross-sectional variation in this manner. This means that cohorts must be compared across time, on the assumption that differences related to the time periods themselves do not cause differences in outcomes. To make this assumption as plausible as possible, cohorts that are as close to one another as possible (cohorts of jobseekers who undertook training in 2009 and 2010) are chosen, rather than cohorts further apart in time.

As per the preceding analysis, samples are chosen from the pool of unemployed people at 31 December in the previous year. To ensure the estimates present a true representation of programme impacts, outcomes (such as earnings and employment) are analysed relative to their levels prior to when the person was observed being unemployed. For example, if earnings in year two were EUR 10 000 and previous earnings were EUR 8 000, the estimate would be EUR 2000 for year two. In this way, only relative changes are compared. This removes all differences between individuals that are stable over time. This additional step is taken, relative to the analysis in Chapters 5 and 6, to try to ensure as much as possible that differences between cohorts, which are not observable using administrative data, are accounted for. The introduction of SMT financing for education potentially widen the pool of jobseekers who might take up education or training. The use of differencing outcomes means that all of the time-invariant differences between these groups of individuals are removed, without any reliance on administrative data to account for observed characteristics.

In order to control for differences that might also change over time, only individuals that look similar to each other are compared to one another (more detail on this is given in Chapter 4, Section 4.4). To determine how successful this method of analysis has been in removing potential differences that would cause estimates to be incorrect, outcomes are reviewed in the period prior to unemployment and training participation. It should be the case that no differences are found between the groups being compared in this period. In the periods before any training programme has taken place, differences must only be driven by individuals having different innate characteristics.

The analysis includes the following steps. First, unemployed individuals are identified at the end of the years 2008 and 2009 and are matched to training spells in the following calendar year (2008 cohort with LMT or SS in 2009, 2009 cohort with LMT, SS or SMT training in 2010). Second, the analysis keeps only individuals with training in either year and defines an indicator which is set to one for individuals unemployed in 2009 and zero for individuals unemployed in 2008. Next, the likelihood of an individual belonging to the 2009 unemployment cohort is estimated using detailed socio-economic and labour market data (see Chapter 4 for more details). Fourth, these estimated likelihoods are used to construct a group of LMT/SS participants from the 2008 cohort who look similar to the 2009 LMT/SS/SMT cohort. Finally, it is estimated whether the 2009 LMT/SS/SMT cohort experiences higher/lower/the same changes to their employment and earnings, relative to their previous employment and earnings, compared to the 2008 LMT/SS cohort in the years following their training participation.

7.2.1. The national roll-out of self-motivated training in 2010 makes it difficult to compare across training cohorts in different years

Despite being able to successfully control for pre-programme earnings and employment differences between a cohort of jobseekers in 2008 that undertook LMT or SS training in 2009 and a cohort of jobseekers in 2009 that undertook either LMT, SS or SMT in 2010, comparison of post-programme outcomes is biased by effects due to differences in the economic cycle. Figure 7.1 shows that the pattern of effects on earnings for the training cohorts is very similar to the pattern of effects on earnings when comparing jobseekers in the same two years who do not undergo any training (labelled “Robustness” in the chart). For the analysis to be robust, there should be no difference in earnings patterns for the unemployed who receive no training. This means it is not possible to interpret this trajectory as a result of participation in LMT, SS or SMT relative to LMT and SS only. This analysis is similar for effects on employment and is detailed in the technical report (OECD, 2023[2]).

One additional analytical check can be performed to try to remove the effect of the economic cycle, by using the changes to the unemployed without training as a proxy for year specific impacts. This is done by subtracting the changes to jobseekers without any training from the changes to LMT+SS+SMT cohort. When this is done, no clear pattern emerges on the impact of LMT+SS+SMT across earnings, though when repeated for employment there is a positive impact across the shorter term (years one to three). This relies on the assumption that changes to outcomes for the non-training participant unemployed provide a good proxy for the changes that would be experienced by the training participants in the same period (more detail is provided in the technical report (OECD, 2023[2])).

In order to provide compelling evidence on how the introduction of SMT affected the uptake of and outcomes from training, relative to a world where only LMT or SS was available to jobseekers, it would be beneficial to undertake a trial which altered eligibility for some individuals. The nature of SMT means it is the individuals who participate in training that determine this participation, to a greater extent than counsellors in TE Offices. Therefore, it is not viable to use potential differences in regional intensity of training to determine its impact. This is because differences are driven by individuals and not due to differences in policy interpretation by offices or staff. There is currently no means by which to robustly compare differences in eligibility between individuals as the same point in time. A randomised trial would resolve this and remove the challenges to analysis that are currently evident from comparing cohorts across different time periods.

Figure 7.1. Changes to earnings over time are driven by underlying differences in the economic cycle

Additional effect on annual earnings for LMT/SMT/SS relative to LMT/SS and a robustness check on jobseekers without training in the same years



LMT: Labour market training. SMT: Self-motivated training. SS: Study-subsidy.
Note: The main series in blue compares the additional earnings that a cohort of jobseekers in 2009 with either LMT, SS, or SMT participation in 2010 experience relative to a cohort of jobseekers in 2008 with LMT or SS only in 2009. The "robustness" series presents the additional earnings a set of unemployed jobseekers in 2009 relative to a set of unemployed jobseekers in 2008, neither of whom participated in any training.
All outcomes are expressed as differences compared to their level in year -4. Year 0 is the year in which an individual is identified as being unemployed at the end of the year. For the cohorts with training, this training starts in year 1. The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish nationality, the type of municipality, the quarter of registration into unemployment (time trend), as well as previous year employment status, income. The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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7.3. Does self-motivated training differ to the study subsidy?

It is important to understand how SMT interacts with or replaces other benefits which provide support for studying. One such support is SS, paid by KELA to adults to continue education. Its financial contribution is small, averaging around EUR 1 100 per annum for the unemployed cohorts observed between 2012 and 2014. As discussed in Chapter 4, SMT supports individuals with a higher payment than they could receive under SS, so it is possible this additional payment helps them to continue in their studies and complete their education. In both SMT and SS the underlying education can be the same, the only difference is in the amount of financial support that an individual receives. If it is the case that SMT improves educational attainment, then this additional cost to the taxpayer may be worthwhile if it helps to improve labour market outcomes This chapter asks the question of what outcomes look like for participants that begin SMT relative to those for individuals that start using the SS, to discern whether any differential patterns emerge as a result.

To address the question, the SMT participants are compared against a group of SMT non-participants, all of whom participate in education and receive the SS instead. Participants are compared across the years 2012-14 to utilise the same timeframe as the individual analysis on SMT and LMT in the preceding chapters. To make the groups more comparable, individuals are classed as participating in SS if it is the

first instance of them having done so in the data, to avoid individuals who may have begun receiving this subsidy previously. This reduces the sample sizes somewhat. There are an annual average of 16 000 unemployed individuals in this period receiving SS, for whom around 7% are in receipt for the first time (around 900 per annum). This contrasts to around 7 500 individuals starting SMT per year. Furthermore, analysis is restricted to individuals aged 24 and above, to preclude the inclusion of SS participants that would be ineligible to participate in SMT. This reduces the sample size further, so that only 1 250 participants remain across the sample period. Participation for SS is defined as having a positive annual payment of SS.

The small sample sizes involved and the large degree of difference between SMT participants and SS participants mean that it is challenging to use propensity scores to generate similar groups and the results should be interpreted with a degree of caution. The matching manages to create a pool of SS participants that are more similar SMT participants, though some differences remain between the two groups. Table 7.1 demonstrates that whilst across most dimensions, matching is successful at reducing differences between SMT and SS participants, for some characteristics matching reduces the similarities of the two groups. For example, the proportion of car ownership is more similar between the SMT participants (44%) and the unmatched SS participants (42%) than it is between SMT and matched SS participants (30%). This can be a problem for algorithms in any matching analysis but is exacerbated when the sample sizes are small, as in this case, when it becomes more difficult to find an individual which matches another closely across all dimensions (also see OECD (2023[2]) for more details on standardised difference in means pre- and post-matching). When evaluating earnings and employment prior to unemployment, this matching does manage to remove the differences between the SMT and SS for employment outcomes. It is similarly successful in balancing annual earnings in the year before the first observation, but in year zero, earnings for the SMT cohort are above those for the SS.

Table 7.1. Participants in self-motivated training and study subsidy differ considerably

Comparison of observable characteristics by treatment status

	SMT participants	Matched SS participants	Unmatched SS participants
Demographic characteristics			
Female	0.58	0.53	0.65
Finnish national	0.94	0.88	0.86
Age	35.75	33.98	38.38
Car Ownership	0.44	0.30	0.42
Number children under 3	0.15	0.16	0.08
Number of children in household	0.90	0.86	0.91
Marital status			
Unmarried	0.50	0.56	0.36
Married	0.38	0.35	0.46
Divorced	0.12	0.08	0.17
Geographical location			
Urban	0.78	0.82	0.81
Semi-urban	0.13	0.09	0.11
Rural	0.10	0.09	0.08
Unemployment history			
Unemployment spells year-1	1.18	1.33	0.76
Unemployment spells year-2	1.01	0.83	1.11
Months unemployed year-1	3.37	3.37	1.93
Months unemployed year-2	2.58	2.02	2.39
Months unemployed year-3	2.35	1.87	2.67

	SMT participants	Matched SS participants	Unmatched SS participants
Employment history			
Months employed year-1	5.72	5.85	3.68
Months employed year-2	6.07	6.22	4.38
Months employed year-3	5.97	5.79	5.24
Annual earnings year-1	11 953	14 017	5 810
Annual earnings year-2	12 186	12 965	7 468
Annual earnings year-3	11 777	11 068	10 270
Level of education			
Unknown	0.23	0.26	0.23
Upper secondary	0.50	0.49	0.45
Short cycle tertiary	0.07	0.05	0.07
Bachelors or equivalent	0.11	0.07	0.13
Masters or equivalent	0.07	0.14	0.10
Field of education			
Generic	0.33	0.38	0.29
Arts & humanities	0.09	0.04	0.07
Social sciences	0.01	0.03	0.03
Business	0.12	0.10	0.14
ICT	0.04	0.03	0.04
Engineering	0.17	0.14	0.13
Agriculture	0.03	0.03	0.04
Health and welfare	0.06	0.07	0.13
Services	0.11	0.13	0.09
Unknown/other	0.04	0.03	0.04

Note: Marital status, geographic location, Level and Field of Education, Female, Finnish National and Car ownership all express proportions of the population. Other variables are mean values. Earnings in Euros. Field of Education – Unknown/other includes Natural Sciences and Education, to avoid statistical disclosure of small groups. For employment and unemployed history, years are relative to the year in which the individual was unemployed at the end of the year. So that 'year-1' represents annual values of the variable in the year preceding the unemployment (if an individual was unemployed in December 2012, year-1 would represent variable values for 2011). SMT participants represent those participants that have been matched with a SS participant. This does not include all SMT participants, as nearest-neighbour matching is used with a 0.05 caliper, meaning that individuals without a match within +/- 0.05 of their propensity score are disregarded. 92% of all SMT participants have a matched SS participant. Unmatched SS participants represent all SS participants, aged 24 and above, matched SS participants include only those matched to a similar SMT participant and is weighted so that participants that are matched to more than one SMT participant contribute more to the overall variable value.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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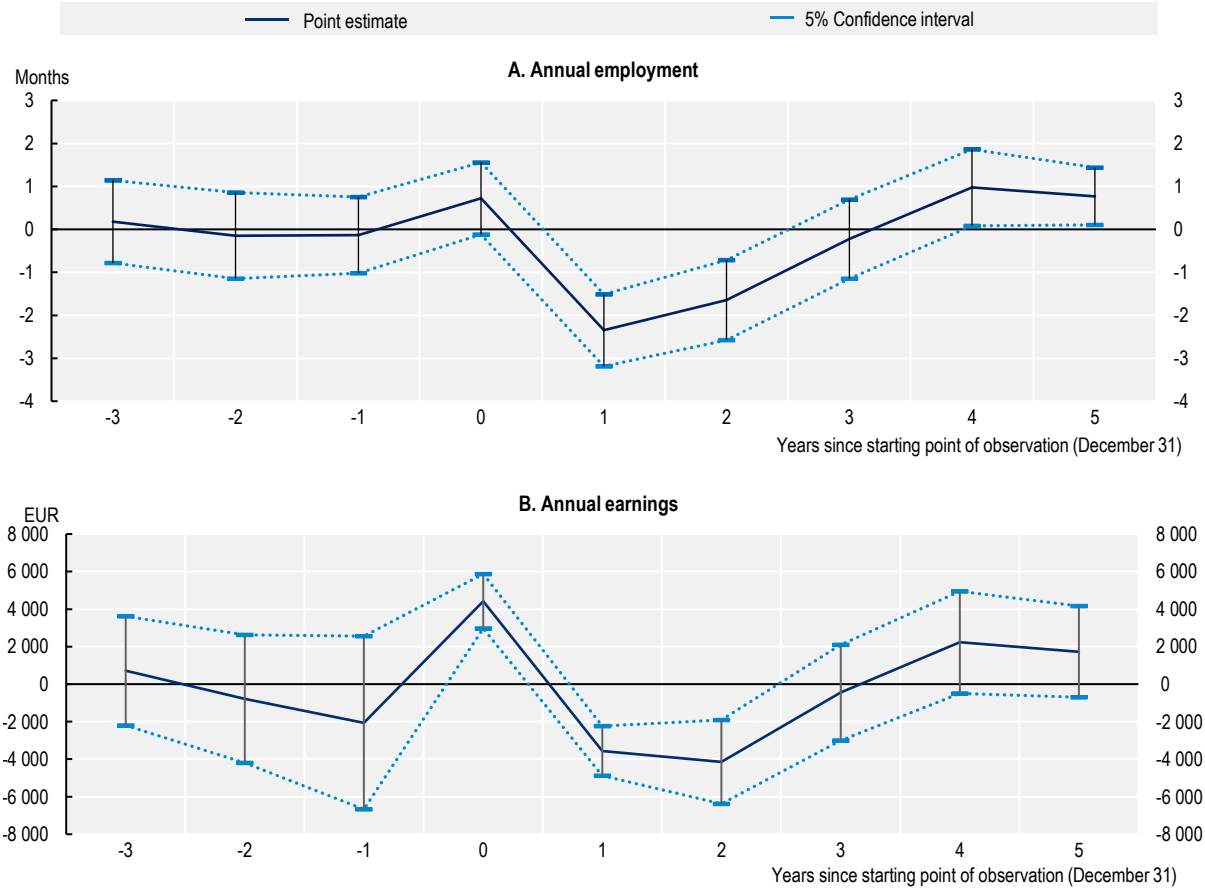
When looking at future outcomes over time, there is tentative evidence to suggest that in the longer run, there may be additional benefits of SMT, relative to those individuals who use only SS grants (Figure 7.2). Similar to the main analysis in Chapter 5, a larger lock-in period is observed for SMT participants relative to those receiving SS. However, a statistically significant effect is found on employment (0.77 months of additional annual employment) is observed by year four and the point estimate for annual earnings is positive, if insignificant (EUR 2 200). Given that SMT is designed to help individuals augment skills that may give rise to lifelong benefits in the labour market, such early evidence on the emergence of positive trends is welcome. It is at least suggestive that the introduction of SMT may have allowed individuals who would have otherwise utilised the SS route towards meaningful accumulation of further skills, that enable them to progress their careers as is discussed in Chapter 5. The larger lock-in period observed, for educational programmes that should be similar between SS and SMT, suggests that the additional financial contribution that SMT provides does help individuals to continue in education. In this respect it seems that SMT is well-targeted towards enabling jobseekers to increase their educational attainment and there are no obvious displacement effects whereby the payment of SS at a lower rate could generate the same

outcomes at a lower cost to the taxpayer. There is no evidence to suggest that increasing the lower age limit of SMT, in the expectation that individuals could instead utilise SS, would be beneficial to individuals and may decrease their likelihood of completing studies. On the contrary, neither is there evidence that lowering the age limit for SMT below 25 would be beneficial either. The current lower age limit of 25 for SMT seems an appropriate compromise between facilitating participation in SMT (and thereby increasing the likelihood of continuing in education) and restricting substitution at lower ages, for whom studying without unemployment benefit is a routine occurrence and represents the continuation from lower levels of education.

Figure 7.2. Self-motivated training has a larger lock-in period but better longer-term outcomes relative to the study subsidy

Employment and earnings outcomes for self-motivated training participants relative to study subsidy recipients



Note: The analysis presents nearest-neighbour propensity score matching results which matches individuals based on several characteristics: duration in unemployment until the point of observation, history in unemployment over the past two years (spells and days), age, gender, marital status, education level and field, Finnish nationality, the type of municipality, the quarter of registration into unemployment (time trend), as well as previous year employment status, income. The confidence intervals are shown at the 5% level of significance and represented by the whiskers delimiting the dotted lines on the charts.
Source: OECD calculations based on Statistics Finland's repository: FOLK and TEM datasets.

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7.4. Conclusion

To summarise, it is challenging to determine precisely how the introduction of additional financing for education via SMT affected outcomes from training participation in aggregate for jobseekers. This is because it was introduced close to the global financial crisis and rolled out nationally rather than piloted first. However, it is important to recall that the evaluation of each programme separately in the preceding chapters has shown that both SMT and LMT have positive impacts on longer term labour market outcomes. Qualitatively the introduction of SMT has also introduced a mechanism by which jobseekers can access different types of education for skills accumulation with greater financial support. The fact that both programmes are independently able to provide benefits to their participants (Chapters 5 and 6) provides reassurance that the system of training for jobseekers in Finland is helping individuals to connect with jobs in the labour market.

To provide more insight into how the suite of provision is viewed by both jobseekers and case workers at TE offices, qualitative analysis may be beneficial to further investigate the mechanisms underlying the choices between training and the subsequent outcomes. A detailed survey of caseworkers and training participants (and non-participants) motivations, thoughts and feelings regarding the suite of training packages on offer would allow a thorough process evaluation to be conducted, enabling more scrutiny of potential causal mechanisms, outside of a narrower quantitative evaluation. Similarly, considering how administrative data are collected and reviewed in the future may aid operational decision-making. At present, there are few data within TEM to guide policy makers and operational staff on how SMT are selected, progressed and completed by individuals, because it is unnecessary for its practical implementation (education is run by the Ministry for Education and Culture and ongoing participation is confirmed to KELA and the unemployment insurance funds). However, this makes it more challenging to scrutinise and review how the policy actually operates. This is of increasing importance now as Finland embarks on labour market reforms, which introduce more contact between jobseekers and TE Office counsellors. This is centred around conditionality and jobseeking requirements, however, it also bears more thought into precisely whether and how caseworkers might keep contact with individuals undergoing training, particularly those undergoing SMT. Keeping jobseekers abreast of labour market developments, to minimise as far as possible the lock-in effects that are present from delaying job search to participate in training, may enable better outcomes for both individuals and government.

An analysis of the relationship between SMT and SS has provided some tentative evidence that they are complementary. When reviewing SMT alongside SS, the results suggest that in the longer-term SMT provides for greater growth in earnings and employment. Despite a larger initial lock-in period, individuals appear less likely to drop out of education and therefore improve their potential labour market outcomes. The ability for participants to retain unemployment benefits whilst in the education system, is important as it allows older participants, who are more likely to have families, greater financial support to continue their education (see Table 4.2 in Chapter 4 for descriptive statistics on SS and SMT). The differences in the cohorts undertaking SS and SMT mean that there is not a large degree of overlap between the two cohorts to begin with. Furthermore, the age restriction on SMT, so that individuals under the age of 25 cannot access it, helps to keep the SS and SMT cohorts relatively distinct. For those individuals that utilise SMT rather than SS, they have relatively better long-term outcomes, so that any displacement from SS to SMT produces better results for participants. The lower age cut-off at 25 for SMT seems to be an appropriate compromise between allowing participants to benefit from SMT's financial support without crossing into the routine educational system where university courses are a natural successor to prior education and are relatively separate to the labour market.

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Connecting People with Jobs

Evaluation of Active Labour Market Policies in Finland

This report uses rich administrative data from different registers in Finland to evaluate the impact of two types of training available to jobseekers: labour market training; and self-motivated training. Training outcomes are examined that go beyond the probability of employment and how different population groups are affected. The report also assesses the framework for impact evaluation of active labour market policies (ALMPs) in Finland, covering the whole cycle of evidence-based policy making from strategy and planning of evaluations, resources, data collection and evaluation methodologies to dissemination of evidence and use in policy making. Finally, the report makes recommendations for improving the effectiveness of Finland's ALMPs and strengthening the capacity of the Finnish authorities in conducting ALMP impact evaluations. This report is the eleventh in a series of country reports on policies to connect people with better jobs. It was produced as part of the OECD's project with the European Commission which aims to raise the quality of the data collected and their use in the evaluation of the effectiveness of ALMPs.

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